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BRONZES ANTIQUES
DE
LA CHINE

APPARTENANT A C. T. LOO ET Cie

PAR

M. TCH'OU TŌ-YI

AVEC UNE PRÉFACE ET DES NOTES DE M. PAUL PELLIOT
MEMBRE DE L'INSTITUT

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BRONZES ANTIQUES DE LA CHINE
APPARTENANT A C. T. LOO ET Cie

PRINCIPALES PÉRIODES MENTIONNÉES DANS LE CATALOGUE

Francais		English
Dynastie Chang	? 1766-1122 av. J.-C. — ? 1766-1122 B. C.	Shang Dy.
— Tcheou	1122-255 av. J.-C. — 1122-255 B. C.	Chou »
— Ts'in	255-206 av. J.-C. — 255-206 B. C.	Ts'in »
— Han	206 av. J.-C.-220 ap. J.-C. — 206 B. C.-220 A. D.	Han »
— T'ang	618-906 ap. J.-C. — 618-906 A. D.	T'ang »

PRÉFACE

M. Loo m'a demandé de présenter au public le catalogue de la collection de bronzes anciens qu'il a fait venir de Chine récemment.

Je me rends bien volontiers à son désir. Le principal obstacle à l'étude des anciens monuments chinois est le manque de reproductions satisfaisantes. Les inventaires des archéologues chinois, d'une information si ingénieuse au point de vue philologique et épigraphique, ne donnent le plus souvent, pour les objets eux-mêmes, que des contours au trait d'une approximation décevante. Les publications européennes sont encore rares, souvent à trop petite échelle ou d'exécution médiocre. Nous devons donc savoir un vif gré aux antiquaires quand ils nous font connaître, par d'excellentes planches, les pièces les plus importantes qui passent entre leurs mains. Celles que M. Loo a rassemblées comptent parmi les plus remarquables qu'on ait vues en Europe jusqu'ici. Le catalogue illustré en sera un instrument de travail précieux aux archéologues.

Le catalogue a été établi par M. 褚德彝 Tch'ou Tö-yi, ancien secrétaire du vice-roi Touan-fang, et l'un de ceux qui ont travaillé à l'élaboration du 陶齋吉金錄 *T'ao tchai ki kin lou*. Tel quel, il donne nombre de renseignements que nous pourrons mettre à profit. Sans doute serait-il possible de contester certains raisonnements et j'inclinerais parfois à abaisser les attributions d'une dynastie. L'intérêt des objets, dont l'authenticité n'est pas douteuse, n'en serait pas diminué. Mais mieux vaut laisser les opinions de M. Tch'ou telles qu'il les a formulées. Je me suis borné à ajouter entre parenthèses quelques dates et références, et, au bas des pages, de rares notes suivies de mes initiales.

P. PELLIOT.

PLANCHES I-II

Tsouen à hibou, de la dynastie Chang.

Dans le *Tcheou li*, parmi les mandarins du printemps, à la section du préposé aux vases Tsouen et Yi (trad. Biot, I, 472), il est dit : « Lorsque l'on offre le sacrifice Ts'eu au printemps et le sacrifice Yo en été, on emploie pour les libations des vases de la forme Yi, dits vase du coq (Ki-Yi) et vase de l'oiseau (Niao-Yi) ». Les libations se faisaient avec du vin. Les anciens employaient l'un pour l'autre les mots Tsouen et Yi. Le « Yi à oiseau » (Niao-Yi), c'est un vase à vin (Tsieou-Tsouen) qui a la forme d'un oiseau.

Le présent vase est haut de o m. 40. Il est fait en forme de hibou. Deux pierres précieuses rouges sont enchâssées dans les yeux. La tête sert de couvercle. De quelque côté qu'on le regarde, il a l'apparence de la vie.

Au temps des trois premières dynasties, le hibou était considéré en Chine comme un oiseau sans piété filiale. Les *Mémoires historiques* de Sseu-ma Ts'ien disent qu'anciennement le Fils du Ciel sacrifiait à l'Empereur Jaune au printemps, et y employait un hibou (trad. Chavannes, III, 467-468). Ce vase-ci doit être un vase à vin qui était employé dans les sacrifices à l'Empereur Jaune.

Le vase est tout entier de couleur turquoise ; cela est dû à l'action du sol sur le cuivre pendant un enfouissement de plusieurs milliers d'années. Les auteurs qui ont parlé des bronzes anciens, y compris le *Po kou t'ou*, ont ignoré ce genre de vase, qui est vraiment très rare, et offre ample matière aux recherches des archéologues [1].

1. [On connaît déjà plusieurs vases en forme de hibou et d'aigle, dans les collections Eumorfopoulos, Peytel, Meyer. — P.P.]

PLATES I-II

Owl-tsun, of the Shang dynasty.

In the *Chou li*, among the officials of the spring, in the section devoted to the *tsun* and *i* vases (translation Biot, 1, 472) it is said : " When the *tz'ŭ* sacrifice is offered in spring, and the *yo* sacrifice in summer, vases of the *i* form are used for the libations, which are called vases of the cock (*chi-i*) and vases of the bird (*niao-i*). " The libations were made with wine. The ancients employed the words *tsun* and *i* indifferently. The " bird-*i* " (*niao-i*) is a wine jar (*chiu-tsun*) which has the form of a bird.

The present vase is o m. 40 high. It is made in the form of an owl. Two precious red stones are inlaid in the eyes. The head serves as a lid. From whatever side it is looked at, there is a life-like appearance.

In the time of the first three dynasties the owl was considered in China as a bird without filial piety. The *Historical Memoirs* of Ssŭ-ma Ch'ien say that anciently the Son of Heaven sacrificed to the Yellow Emperor in spring and then used an owl (cf. transl. Chavannes, III, 467-468). This vase must accordingly be a wine jar which was used in sacrificing to the Yellow Emperor. The vase is of turquoise colour throughout, which is due to the action of the soil on the copper during a burial of several thousand years. The authors who have spoken of ancient bronzes, including the *Po ku t'u*, have ignored this kind of vase, which is truly very rare and offers ample material for the researches of archaeologists [1].

1. [Several vases in the form of owls and eagles are already known in the Eumorfopoulos, Peytel and Meyer collections. — P. P.]

PLANCHE III

Lei à trois têtes d'animaux, de la dynastie Chang.

Ce *lei* est haut de o m. 60, large à l'orifice de o m. 302 ; sa circonférence à la panse est de 1 m. 55. Il est divisé en trois grands segments et trois registres. Le registre supérieur est orné de trois têtes de bovin (?), dont chacune occupe le centre d'un des segments. Sur le registre médian, le centre est occupé par un masque de T'ao-t'ie. Six dragons stylisés occupent les six segments du registre inférieur.

Le vase est de fabrication et de décor très analogues à celui qui se trouve dans la collection du musée de Philadelphie, mais il n'a pas et n'a jamais eu de couvercle. Il y a également un vase semblable, à patine noire, au Metropolitan Museum de New-York. Trois trous sont ici à la limite de chacun des trois segments entre le registre médian et le registre inférieur.

Tout ce Lei est d'une belle patine vert-olive, il est dans un état de conservation admirable, et ses dimensions en font une pièce exceptionnelle.

PLATE III

Lei with three animal heads, of the Shang dynasty.

This *lei* is o m. 60 high, o m. 302 wide at the mouth, and has 1 m. 55 in circumference. It is divided into three large lobes and three registers. The upper band is decorated with three " bovine " heads, each one fills the centre of one of the lobes. On the median register the centre is filled by a mask of *t'ao-t'ie*. Six conventionalized dragons occupy the six lobes of the lower register.

The make and the decoration of this vase are very similar to the one in the University Museum of Philadelphia. But is has no lid and never had one. It is also a vase resembling the one with black patina in the Metropolitan Museum of New-York. This one has three holes at the limit of each of the three lobes between the median and the lower register.

This *lei* is entirely covered with a beautiful olive green patina. It is admirably preserved and its large dimensions make this piece an exceptional one.

PLANCHE IV

Touei à quatre anses, de la dynastie Chang.

Ceux qui ont disserté des vases anciens ont toujours parlé de 彝 Yi quand il n'y avait pas de couvercle et de 敦 Touei quand il y en avait un. Récemment, des collectionneurs comme 吳大澂 Wou Ta-tch'eng (1834-1902) et 陳介祺 Tch'en Kiai-k'i (1812-1885) ont dit que, parmi les objets antiques, il y avait seulement des Touei et pas de Yi. Bien que cette opinion ne mérite pas une entière créance, on doit appeler Touei ceux de ces vases qui ont une base carrée. Le *Chouo wen* de Hiu Chen (première moitié du II[e] siècle ap. J.-C.) dit que le Touei est un vase à contenir du millet ; ce doit donc être qu'on y mettait les aliments.

Ce Touei est haut au total de o m. 285 et large au sommet de o m. 22 ; la hauteur du socle est de o m. 115, sa largeur est de o m. 21 ; sur les côtés, il y a quatre anses, en forme de têtes de bœuf. L'inspiration en est très vivante. Chaque anse est haute de o m. 17.

PLATE IV

Tui with four handles, of the Shang dynasty.

Those who have written about ancient vases have always spoken of 彝 *i* when there was no lid, and 敦 of *tui* when there was one. More recently, collectors like 吳大澂 Wu Ta-ch'eng (1834-1902) and 陳介祺 Ch'en Chieh-ch'i (1812-1886) have said that among the ancient objects there were only *tui* and no *i*. Though we must not entirely credit this assertion, we should call *tui* those vases that have a square base. The *Shuo wen* of Hsü Shen (first half of the second century A. D.) says that the *tui* is a vase for holding millet ; it was therefore used to put food in.

This *tui*, including the base, is o m. 285 high, and at the top is o m. 22 wide. The base alone is o m. 115 high, and o m. 26 wide. On the sides are four handles shaped like heads of oxen. They are life-like in spirit. Each handle is o m. 17 high.

Le corps entier du vase est couvert de saillies en forme de pointes émoussées. La base est décorée de dragons et de phénix.

A l'intérieur de cette base est suspendue une clochette. Dans l'antiquité, à chaque grand sacrifice, pour chaque banquet solennel, on disposait des instruments de musique, et la musique se faisait entendre pendant le repas ; c'est ce qu'on appelait « manger dans des vases au son des cloches ».

Ce vase a, en dessous, une clochette ; quand on apportait de la nourriture dans ce vase, la clochette sonnait, en harmonie avec la musique.

La grande majorité des Touei n'ont que deux anses. Toutefois, dans la collection Tch'en à Wei-Hien (Chantong), il y avait un Touei aujourd'hui conservé à New York (dans la collection E. Meyer) et qui a également quatre anses. Ici il y a en outre la clochette de la base ; c'est là une particularité qui n'avait pas encore été rencontrée.

Le vase est à patine de mercure de couleur vert-olive ; il s'est extrêmement bien conservé. La cause en est qu'au moment de la fonte, on a employé du cuivre d'excellente qualité. L'exécution est admirable. C'est vraiment un joyau parmi les vases de bronze de la dynastie Chang.

The whole body of the vase is covered with protuberances having the shape of knobs. Its base is decorated with dragons and phoenixes. From under this base hangs a little bell. In remote ages, at each sacrifice, at each solemn banquet, musical instruments were used, and music was heard during the feast. It was what was called " to eat out of vases to the sound of bells ". This vase has under it a small bell ; when food was brought in this vase the bell tinkled in harmony with the music.

Most of the *tui* have only two handles. Yet in the Ch'en collection at Wei-Hsien (Shan-tung), there was a *tui* with four handles ; it is now in the E. Meyer collection in New York. Here there is besides the little bell hanging from the base ; such a peculiarity had never been met with before.

This vase has a mercury patina of olive green colour, and is extremely well preserved. It is because excellent copper was used at the melting. The whole execution deserves the highest credit. It is a real jewel among the bronze vases of the Shang dynasty.

PLANCHE V

Yi à trois anses, de la dynastie Chang.

Ce Yi des Chang est haut de 0 m. 17, large au sommet, anses non comprises, de 0 m. 30, et à l'intérieur il y a un caractère 史 qui est le mot 史 Che. Dans l'antiquité il y avait aux côtés de l'Empereur deux « Annalistes » 史官 (Che-Kouan). Ses actions étaient enregistrées par l'Annaliste de gauche (Tso-Che), ses paroles étaient enregistrées par l'Annaliste de droite (Yeou-che). Le caractère Che, dans sa forme « sigillaire » (Tchouan), est constitué par une « main » tenant une barre verticale ; la barre verticale, c'est le calame. La main tient le pinceau par le milieu pour montrer que le pinceau est correct; sans partialité. Ici le caractère représente une main gauche tenant le pinceau. C'est qu'il doit s'agir de l'Annaliste de gauche.

Le présent Yi est à trois anses, sur lesquelles sont représentées des têtes d'animaux. C'est là un type inconnu jusqu'ici. En outre, les monstres (K'ouei), les dragons, les gloutons, les dessins orne-

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PLATE V

Three-handled " i ", of the Shang dynasty.

This " *i* " of the Shang dynasty is 0 m. 17 high, 0 m. 30 wide at the top (without the handles). Inside is a character 史 which is the word 史 *shih*. In ancient times, there were by the side of the emperor two " annalists " 史官 (*shih-kuan*). His deeds were recorded by the annalist on his left side (*tso-shih*) ; his words were recorded by the annalist at his right (*yu-shih*). The symbol *shih*, in its sigillar form (*chuan*), consists of a " hand " holding a vertical bar ; the vertical bar is the writing stylet or calamus. The hand holds the stylet by the middle to show that it is correct and impartial. Here the symbol represents a left hand holding the stylet, probably referring to the annalist on the left.

mentaux sont d'une finesse exceptionnelle, et tous sont sculptés en relief ; un tel travail ne peut être que de la dynastie Chang, et parmi les vases antiques on n'en peut trouver beaucoup comme celui-ci.

Tout le Yi est de couleur rouge et verte, à patine de mercure. Si on le regarde au soleil, toutes les couleurs y apparaissent. Sur les anses on distingue encore des reflets d'or. C'est que dans l'antiquité on mêlait de l'or à la fonte. Pendant son séjour en terre, ce vase a en outre assimilé les meilleurs éléments du sol ; c'est pourquoi il montre les couleurs rouge et verte. Il est différent des objets ordinaires en bronze et c'est une espèce que les anciens archéologues n'ont pas vue.

The present " *i* " has three handles, on which are heads of animals. It is a type unknown till now. Moreover, the monsters (*k'ui*), the dragons, the gluttons, the ornamental designs are of a rare minuteness and all are carved in relief ; such a work of art can belong only to the Shang dynasty, and among antique vases very few like this can be found.

The whole " *i* " is of a red and green colour with mercury patina. If looked at in the sun, all the colours appear. On the handles a yellow colour can be distinguished ; that is because anciently gold was mixed with the casting. While it rested in the earth, this vase assimilated the best elements of the soil ; and so it shows the colours red and green. It is different from the usual bronze objects and it is a type which the old archæologists have not seen.

PLANCHE VI

Kouei à quatre pieds, de la dynastie Chang.

Ce vase est haut, couvercle compris, de 0 m. 205, long de 0 m. 21, large de 0 m. 155. Son couvercle a la forme d'une écaille de tortue. Le vase lui-même a quatre pieds, si bien que l'ensemble a tout à fait la forme d'une tortue. Le 博古圖 *Po kou t'ou* (début du XIIe siècle) reproduit aussi un vase qu'il appelle 龜卣 Kouei-Yeou (vase Yeou à la tortue), mais qui n'en est pas un en réalité.

Celui-ci est le plus ancien des Kouei. Selon le *Chouo wen*, le Kouei est un vase rectangulaire à céréales. Le 三禮圖 *San li t'ou* (Xe siècle, illustration en partie fantaisiste) dit que le Kouei est rectangulaire à l'intérieur, rond à l'extérieur. Selon le commentaire du 禮記 *Li ki* (IIe siècle),

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PLATE VI

Kui with four feet, of the Shang dynasty.

Height of this vase, 0 m. 205 ; length including the cover, 0 m. 21 ; width, 0 m. 155.
Its cover has the form of a tortoise shell.
The vase itself has four feet, so that the whole has the appearance of a tortoise.

The 博古圖 *Po ku t'u* (beginning of the XIIth century) reproduces also a vase which is called 龜卣 *kui-yu* (*yu* vase of tortoise), but which has never been one in reality.

This one is the oldest of the *kui*. According to *Shuo wen*, the *kui* is a rectangular vase for holding cereals. The 三禮圖 *San li t'u* (Xth century, some illustrations are more or less imaginary) says that the *kui* is rectangular in the interior and round in the exterior. According to the commen-

le Kouei est un vase à contenir les céréales, il a un couvercle en forme de tortue, est rond à l'extérieur et rectangulaire à l'intérieur. Le présent vase est un rectangle à angles arrondis, son couvercle est en forme d'écaille de tortue, de plus il a quatre pieds ; cela est absolument d'accord avec ce que le *San li t'ou* dit du Kouei. Ce Kouei est de la dynastie Chang; c'est pourquoi le couvercle a absolument la forme d'une tortue; les couvercles des Kouei de la fin des Tcheou n'ont déjà plus la forme de tortue. Les Kouei étaient destinés à contenir des céréales, c'est pourquoi ils sont bas et rectangulaires, mais ce vase ne pourrait contenir du vin ; ce n'est donc sûrement pas un Yeou.

Le vase est entièrement à patine de mercure ; sa couleur est celle du vernis noir, et brille. C'est un des plus parfaits parmi les vases des Chang.

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tary of the 禮記 *Li ki* (IId century), the *kui* is a vase for containing cereals, it has a lid in the form of a tortoise-shell and is round in the exterior and square in the interior.

The present vase is a rectangle with rounded corners, its lid is in the form of a tortoise-shell, besides it has four feet, which is absolutely in accordance with what the *San li t'u* says of the *kui*.

This *kui* is of the Shang dynasty, that is why the lid has absolutely the form of a tortoise; the lids of the *kui* of the end of the Chou dynasty have already no longer the form of a tortoise. The *kui* were made to contain cereals, that is why they are low and rectangular, but this vase could not contain wine, and consequently is not a *yu*.

The vase is entirely of a mercury patina, its colour is that of brilliant black lacquer. It is one of the most perfect vases of the Shang dynasty.

PLANCHE VII

Cloche à têtes de Phénix, de la dynastie Chang.

Cette cloche est de facture très archaïque. Elle n'est portée ni dans le *Po kou t'ou* ou le 考古圖 *K'ao kou t'ou* des Song, ni dans le *Si ts'ing kou kien* ou le *Ning cheou kien kou* des Ts'ing, où cependant il y a un répertoire bien complet des objets antiques. Elle est haute de o m. 315, large de o m. 178. Les deux faces portent une tête d'animal, à sourcils épais et grands yeux, qui est sans doute l'animal que les anciens appelaient un 蒲牢 P'ou-Lao. Dans les œuvres de 楊慎 Yang Chen (1488-1559), il est dit que le dragon eut neuf fils, chacun doué d'une qualité spéciale, et que l'un d'eux, P'ou-Lao, avait une voix remarquable. Cela expliquerait sa présence sur la cloche. Tout autour des masques il y a douze boutons allongés, qui doivent figurer les douze tubes musicaux (Liu). Sur les côtés de la poignée, au haut de la cloche, il y a deux têtes de phénix, la bouche dirigée vers le dehors. Houai-Nan-Tseu († 122 av. J.-C.) dit que le cri du phénix répond aux six tubes musi-

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PLATE VII

Bell with phœnix heads, of the Shang dynasty.

This bell is of very archaic style. It is not figured either in the *Po ku t'u* or the 考古圖 *K'ao ku t'u* of the Sung, nor in the *Hsi ch'ing ku chien* or the *Ning shou chien ku* of the Ch'ing dynasty, in which however there is a very complete repertory of antique objects.

It is o m. 315, high and o m. 178 wide. Both faces bear an animal head with thick eyebrows and large eyes, which is very likely the animal called by the ancients 蒲牢 P'u-Lao. In the works of 楊慎 Yang Shen (1488-1559 A. D.) it is said that the dragon had nine sons, each being endowed with a special quality, and that one of them, P'u-Lao, had a remarkable voice; this must explain his presence on the bell. All around the masks are twelve protuberances which would repre-

caux ; la présence des phénix sur cette cloche signifie que le son de cette cloche est à l'échelle des tubes musicaux. Au-dessous des têtes de phénix, sur chaque côté, se trouvaient quatre oreilles superposées ; c'est encore là une particularité qu'on ne rencontre pas sur d'autres cloches. Le *Livre des Montagnes et des Mers* (*Chan hai king*) dit que sur le Mont 豐 Fong il y a une cloche à huit oreilles, qui sonne quand le givre tombe. Le *Chan hai king* est l'œuvre de l'empereur Yu de la dynastie Hia [1]. Cette cloche a huit anses et ceci fournit une nouvelle preuve que c'est un objet des dynasties Hia ou Chang. Elle est à très belle patine bleue et verte ; c'est en vérité un joyau parmi les anciens bronzes.

1. [Le *Chan hai king* est ancien, mais c'est une compilation de dates diverses, dont l'attribution au lointain empereur Yu est purement légendaire. — P. P.]

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sent the twelve musical tubes (*lü*). On the sides of the handle, at the top of the bell, there are two phœnix heads, the mouth turned outwards. Huai-nan-tzŭ († 122 B.C.) says that the cry of the phœnix corresponds to the six musical tubes. The presence of the phœnix on this bell signifies that the sound of the bell is in agreement with the musical tubes. Beneath the phœnix heads on each side were four ears, one on the top of the other, which again is a peculiarity not met with in other bells. The *Book of the Mountains and the Seas* (*Shan hai ching*) says that on Mount 豐 Feng there is a bell with eight ears, which sounds when the frost falls. The *Shan hai ching* is the work of Emperor Yü of the Hsia Dynasty[1]. This bell has eight handles and this gives another proof that it is an object of the Hsia or Shang dynasties.

It has a beautiful and brilliant blue and green patina and is really a jewel amongst the ancient bronzes.

1. [The *Shan hai ching* is ancient, but it is a compilation of various dates; its attribution to the distant Emperor Yü is purely legendary. — P. P.]

PLANCHES VIII-IX

Yi de King, de la dynastie des Tcheou.

Ce Yi est haut de o m. 26 ; le diamètre à l'orifice est de o m. 33. Il est tout entier couvert de boutons en saillies qui figurent des grains de riz et rendent témoignage à l'importance de l'agriculture. Les deux anses sont en forme de tête de bœuf, et figurent les animaux du sacrifice. Le Yi repose sur une base ronde à décors de dragons qui, lors de la disposition rituelle, le mettait plus haut que les autres vases.

A l'intérieur du vase est une inscription de 64 mots en écriture sigillaire, ainsi concue :

惟王十月.歲咸丁亥.王格太室.既立[=位]

宰頵右敬入門.立中廷北嚮.史帶受王

命.書王於史.洛成錫敬赤芾絅衣鸞口

口旂用事.敬對揚王休用作尊彝.敬其

萬年永寶用

PLATES VIII-IX

I of Ching, of the Chou Dynasty.

This *i* is o m. 26 high ; the diameter at the orifice is o m. 33. It is covered all over with small protuberances figuring grains of rice and testifying to the importance of agriculture. The two handles are in the shape of ox-heads which represent the sacrificial animals. The *i* rests on a round base with dragon

« Le dixième mois du calendrier impérial, l'année étant marquée des signes Ting-Hai, alors que l'Empereur était dans le palais, il se rendit à son trône et le fonctionnaire Kiun (ou Yun) introduisit King, qui passa la porte et se tint debout dans la cour centrale, face au Nord. L'historiographe Tai, sur l'ordre de l'Empereur, inscrivit (les mérites de King) dans les annales. De plus, l'Empereur fit don à King d'une jupe écarlate, d'un vêtement orné de.... et d'un étendard à sonnettes. King en remerciement célébra la fortune impériale, et il a fait ce vase pour être précieusement employé pendant dix mille années. »

Tout le vase est à patine de mercure de couleur verdâtre. Les décors des anses et du vase sont d'une exécution admirable.

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ornaments which raised it higher than the other vases at the time of the sacrifices. Inside the vase is an inscription of 64 words in sigillar writing.

惟王十月.歲咸丁亥.王格太室.既立[illegible]

宰頵右敬入門.立中廷北嚮.史帶受王

命.書王於史.洛成錫敬赤芾絅衣鸞口

口旂用事.敬對揚王休用作尊彝.敬其

萬年永寶用

" The tenth month of the imperial calendar, the year being marked with the signs *ting-hai*, while the emperor was in the Palace, he ascended his throne and the official Chü (or Yün) introduced Ching, who passed the door and stood in the central court, facing the north. The historiographer Tai, on the order of the emperor, inscribed (the merits of Ching) in the annals. Further, the emperor gave Chine a scarlet kilt, an embroidered garment, a... and a banner with bells. The grateful Ching celebrated the imperial fortune and made this vase to be used with the utmost care for ten thousand years. "

The whole vase possesses a mercury patina of greenish colour. The ornaments of the handles and of the vase are of an admirable execution.

PLANCHES X-XI

Touei à têtes d'oiseau, de la dynastie Tcheou.

Ce Touei est haut de 0 m. 195 ; le diamètre de l'ouverture est de 0 m. 225 ; chacune des grandes anses est haute de 0 m. 19. La décoration est divisée en deux registres, chacun des deux registres étant occupé par deux animaux extrêmement stylisés.

Le vase a deux anses et deux oreilles. Les deux anses passent au milieu des figures d'animaux ; elles représentent de belles têtes d'oiseaux (phénix ? traités en apparence de coqs). Le pied, assez large, est d'une forme particulièrement élégante, et qui ne s'est rencontrée que rarement.

La patine est noire, abondamment tachetée de rouge-brique.

Cette très belle pièce a une longue inscription de 104 mots ainsi conçue :

惟五年正月己丑琱生有
事召來句事余獻寢氏以
壺告曰以君氏命曰余考
止公僕郭上田多誄弋伯
氏從訂公宕其參汝則宕
其貳公宕其貳汝則宕其
一余懋于君氏大寵報寢
氏帛束璜召伯虎曰余既
敬畏我考我母命余勿敢
辝余或至我考我母命琱
生則謹士

PLATES X-XI

Tui with bird's heads, of the Chou dynasty.

This *tui*, height 0 m. 195, diameter of the mouth 0 m. 225. Each of the large handles, height 0 m. 19.

« La cinquième année, le premier mois, au jour Ki-Tch'eou, (moi) Tiao-Cheng, ayant une affaire, suis venu à Chao pour traiter (cette) affaire. J'ai présenté un vase (Hou) à la famille Tsin, en disant : L'ordre du Seigneur (de Chao) a été que je vérifie les champs appartenant à des sujets du prince et qui sont proches des murailles parce que (leurs limites) étaient très erronées. Yi Po m'a secondé dans cette vérification. Là où (on disait que) vous aviez empiété de trois (dixièmes), vous n'aviez empiété que de deux ; là où (on disait que) vous aviez empiété de deux (dixièmes), vous n'aviez empiété que d'un. Je suis touché par la grande faveur du seigneur (de Chao) et remercie la famille Tsin pour (son don d') une pièce de soie et d'un pendant Houang. Chao Po Hou a dit que, puisque j'étais très respectueux, je ne saurais refuser ce qui était conforme aux ordres de son père et de sa mère et qu'il espérait que je reviendrais, car son père et sa mère me tenaient pour un gentilhomme consciencieux. »

The decoration is divided in two bands, each of the two bands is occupied by two extremely conventionalized animals.

The vessel has two handles and two descending ears. The two handles pass between the figures of the animals, and represent the beautiful heads of a bird (phœnix ? executed more in the appearance of a cock).

The foot, rather large, is of the most elegant shape and rarely to be seen.

The patina is black, abundantly stained with brick-red spots.

This very remarkable piece has a long inscription of 104 characters as following :

惟五年正月己丑琱生有
事召來句事余獻寢氏以
壺告曰以君氏命曰余考
止公僕郭上田多誄弋伯
氏從訂公宕其參汝則宕
其貳公宕其貳汝則宕其
一余懋于君氏大寵報寢
氏帛束璜召伯虎曰余既
敬畏我考我母命余勿敢
辝余或至我考我母命琱
生則謹士

" In the fifth year, the first month, on the day *chi-ch'ou*, (I) Tiao-Sheng, having an affair, came to Shao to transact it. I presented a vase (*hu*) to the Chin family, remarking : " The order of the Lord of (Shao) was that I should check the fields belonging to the subjects of the Prince which are near the walls, because their boundaries were very erroneous. I Po has assisted me in this verification. Where

[Ce Touei de Chao Po Hou était connu, et son inscription de 104 mots, ayant en principe dix mots par ligne, est déjà reproduite en fac-similé, avec quelques légères inexactitudes, dans le 擴古錄金文 *Kiun kou lou kin wen* de 吳式芬 Wou Che-fen (1796-1856), éd. de 1895, III, II, 25-26 ; le déchiffrement de Wou Che-fen diffère sur quelques points de celui de M. Tch'ou. Ce Touei est inséparable d'un autre Touei de Chao Po Hou dont l'inscription est également reproduite dans le *Kiun kou lou kin wen*, III, II, 24-25 ; cette inscription, de texte tout différent, est, elle aussi, de 104 mots répartis à dix mots par ligne. Tiao-Cheng est nommé à nouveau dans cette seconde inscription. L'inscription du Touei du présent catalogue est datée de la cinquième année, premier mois, jour Ki-Tch'eou ; l'autre est de la sixième année, quatrième mois, jour Kouei-Tseu (? ainsi donné par Wou Che-fen, mais il n'y a pas de combinaison Kouei-Tseu dans le cycle sexagésimal). Bien que les règnes ne soient pas spécifiés, il s'agit sans doute des années du même souverain, et le second Touei est postérieur au premier d'un peu plus d'un an. — P. P.]

(it was said) that you had encroached by three (tenths), you had only encroached by two ; where (it was said) that you had encroached by two (tenths), you had only encroached by one. I am touched by the great favour of the Lord (of Shao) and I thank the Chin family for their gift of a piece of silk and of a *huang* pendant. Shao-Po-Hu said that, because I was very respectful, I would not refuse what was in agreement with the orders of his father and his mother, and that he hoped that I would come back again as his father and mother considered me as a conscientious gentleman. "

[This *tui* of Shao-Po-Hu was known, and its inscription of 104 characters, having in principle ten words per line, has already been produced in fac-simile, with some slight inaccuracies, in the 擴古錄金文 *Chün ku lu chin wen* of 吳式芬 Wu Shih-fen (1796-1856), edition of 1895, III, II, 25-26. The reading of Wu differs on some points from that of M. Ch'u. This *tui* is inseparable from another *tui* of Shao-Po-Hu, the inscription of which is also reproduced in the *Chün ku lu chin wen*, III, II, 24-25; this inscription, of an entirely different text, is also of 104 words, divided into ten words per line. Tiao-Sheng is named again in the second inscription. The inscription on the *tui* of the present catalogue is dated from the fifth year, first month, *chi-ch'ou* day ; the other is of the sixth year, fourth month, *kui-tzŭ* day (thus given by Wu-Shih-fen, but there is no *kui-tzŭ* combination in the sexagesimal cycle). Though the reigns are not specified, the years are most probably those of one and the same sovereign, and the second *tui* is posterior to the first by little more than a year. — P. P.]

PLANCHE XII

Yi de Hien-Chou, de la dynastie des Tcheou.

Ce Yi est haut de o m. 16 ; le diamètre de l'orifice est de o m. 215. Sur les deux faces il y a des motifs de « glouton ». Les deux anses représentent deux têtes d'animaux. Dans l'intérieur est une inscription de trente mots :

惟王三月初吉辛卯憲叔奉祭于大廟

賜貝五朋揚天子休用作祖攷寶尊彝

« Le troisième mois du calendrier royal, en un jour fauste de la première décade, qui était marqué des signes Sin-Mao, Hien-Chou reçut l'ordre de faire un sacrifice au T'ai-Miao. (L'empereur) lui octroya

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PLATE XII

I of Hsien-Shu, of the Chou dynasty

This " *i* ", height o m. 16, diameter of the mouth o m. 215.
On the two sides, there are motifs of " glutton ". The two handles represent two animal's heads. Inside the vase and in the centre is an inscription of 30 characters :

惟王三月初吉辛卯憲叔奉祭于大廟

賜貝五朋揚天子休用作祖攷寶尊彝

" The third month of the royal calendar, on an auspicious day of the first decade, which was marked by the *hsin-mao* signs, Hsien-Shu received order to perform a sacrifice to the T'ai-Miao.

cinq P'ong de cauries. Célébrant la fortune du Fils du Ciel, (Hien-Chou) les a employés à fondre des vases précieux de sacrifice pour ses ancêtres. » Le P'ong était de dix cauries ; il s'agit de cauries de bronze faits à l'image de cauries véritables ; ces cauries de bronze étaient la monnaie courante sous les Tcheou. Le Yi, comme le Tsouen avec lequel il est mentionné, était destiné à contenir du vin.
Tout le vase est couleur « vert peau de pastèque » (koua-p'i-lu), avec des endroits rouges.

(The Emperor) bestowed upon him five *p'eng* of cowries. Celebrating the fortune of the Son of Heaven, (Hsien-Shu) used them to cast precious vases of sacrifice for his ancestors. " The *p'eng* was of ten cowries ; the question is here of bronze cowries, made in the image of real cowries ; these bronze cowries were used as common currency under the Chou dynasty. The " *i* ", as well as the *tsun* which is mentioned alongside with it, was employed to contain wine.
All this vase is covered with a water melon green patina (*kua-p'i-lü*), with parts in red.

PLANCHE XIII

Touei de Tchong-Che-Fou, de la dynastie Tcheou.

Ce Touei est haut de o m. 10 ; son diamètre à l'orifice est de o m. 19. Tout autour est une bande ornée de dragons (ou de phénix ?) marchant. Les deux anses sont en forme d'une tête de mouton. Au fond du vase est l'inscription suivante : 中師父作女子旅敦其用萬年
« Touei de voyage fait par Tchong-Che-Fou pour sa fille ; puisse-t-il servir dix mille années ! » Le caractère 中 Tchong est l'équivalent de 仲 Tchong, qui ne comportait pas anciennement la clef de l'« Homme ». 師 Che est écrit ici en abrégé, de la même manière que sur le Ting de Yu 盂鼎 ; 父 Fou est l'équivalent de 甫 Fou.
L'exécution de ce Touei est très remarquable. Toute sa surface a l'éclat de la dorure, avec parfois une patine de mercure ; le vert en est comme le jade ; le rouge, comme le cinabre ; le bleu, comme le lapis-lazuli. C'est vraiment un vase des plus précieux.

PLATE XIII

Tui of Chung-Shih-Fu of the Chou dynasty.

This *tui* is o m. 10 high ; its diameter at the mouth is o m. 19. All round is a band adorned with dragons (or phœnixes ?) walking. The two handles are in the form of a sheep's head. At the bottom of the vase is the following inscription : 中師父作女子旅敦其用萬年
meaning : « Travelling *tui* made by Chung-Shih-fu for his daughter ; may it serve ten thousand years ! » The character 中 *chung* is the equivalent of 仲 *chung* which was anciently written without the « man » radical. 師 *Shih* is here written in short in the same manner as on the *ting* of Yu 盂鼎 ; 父 *fu* is the equivalent of 甫 *fu*.
The execution of this *tui* is very remarkable. The whole surface has the lustre of gilding with sometimes a mercury patina ; the green is like jade ; the red like cinnaber ; the blue like lapis-lazuli. It is truly a most precious vase.

PLANCHE XIV

Vase tripode à vernis noir, de la dynastie Tcheou.

Hauteur, oreilles comprises, o m. 214 ; diamètre o m. 168.
Ce vase tripode (Ting) est naturellement divisé en trois segments, dont chacun est orné d'un masque de T'ao-T'ie. Exécution et matière sont excellentes. La conservation est parfaite. Tout le vase est couvert d'une patine de « vernis noir » brillant, avec quelques parties de vert malachite, et, sur les pieds, des portions de patine rouge-brique.

PLATE XIV

Tripod vase with black patina", of the Chou dynasty.

Height, including handles, o m. 214 ; diameter o m. 168.
This tripod vessel (*ting*) is naturally divided into three lobes, each is decorated with a mask of *t'ao-t'ieh*. The execution and metals are excellent, and the preservation is perfect.
All the vessel is covered with a brilliant black patina, with some parts in malachite-green, and parts of brick red on the feet.

PLANCHE XV

Hou « à conserver toujours précieusement », de la dynastie Tcheou.

Les Hou étaient des vases à vin. Celui-ci est haut de o m. 465 ; le diamètre de l'orifice est de o m. 22 ; la circonférence, à la panse, est de 1 m. 10. Tout le vase est décoré de dragons et de K'ouei enroulés. Des deux côtés sont deux anses dont chacune retient un anneau. Les anses sont en forme de têtes de cerfs (?) stylisées. Dans l'orifice est une inscription en caractères « sigillaires » dont les deux premières lignes sont assez effacées, il ne reste de clairs que dix caractères des deux dernières lignes :

無疆子=孫=永寶是尚 « ... sans limites ; que fils et petits-fils conservent toujours précieusement ce ... ».

Les Hou ordinaires n'ont que huit à neuf pouces de haut ; celui-ci atteint plus d'un pied trois pouces ; il doit avoir été fabriqué à l'usage du Fils du Ciel. Sa couleur est en partie d'un rouge de cinabre, à patine de mercure.

PLATE XV

Hu " to be ever preciously preserved ", of the Chou dynasty.

The *hu* were wine jars. This one is o m. 465 high ; the diameter of the opening is o m. 22 ; the circumference in the middle is 1 m. 10. The whole vase is decorated with curled dragons and *k'ui*. On the two sides are two ears, each of which holds a ring. The ears are in the shape of conventionalized deerheads (?). In the opening is an inscription in " sigillar " characters of which the first two lines are almost erased, ten characters of the last two lines only remaining :

無疆子=孫=永寶是尚 " ... without limits ; to be ever preciously preserved by sons and grandsons this ... ".

Usually the *hu* are only 8 or 9 inches high ; this one reaches more than 1 foot 3 inches. It must have been made for the use of the Son of Heaven. Its colour is partially cinnabar red, with mercury patina.

PLANCHE XVI

Tsouen à trois têtes de « glouton », de la dynastie Tcheou.

Dans l'antiquité le vin était contenu dans des 尊 Tsouen. Les dimensions des Tsouen étaient variables, mais dans les sacrifices on se servait de grands Tsouen.

Le présent Tsouen est haut de o m. 35, et a o m. 268 de diamètre au sommet.

Le bandeau supérieur est décoré de dragons enroulés ; ceci montre qu'il s'agit d'un Tsouen de l'Empereur. Le bandeau inférieur est décoré de figures de « gloutons » (T'ao-t'ie). Les anciens connaissaient un animal insatiable de boisson et de nourriture, et qui était lui-même dévoré par les autres animaux ; on l'appelait T'ao-t'ie. C'est pourquoi les anciens vases à vin sont décorés de « gloutons » en guise d'avertissement ; c'est là une idée profonde. Il y a trois têtes de ces animaux, pour exprimer la « triple offrande ».

Tout ce Tsouen est à patine de mercure, de couleur bleu-turquoise. La teinte originale du bronze a entièrement disparu.

PLATE XVI

Tsun with three " Glutton's " heads, of the Chou dynasty.

In ancient times wine was contained in 尊 *tsun*. The dimensions of the *tsun* were variable, but in the sacrifices large *tsun* were used.

The present *tsun* is o m. 35 high, and has o m. 168 in diameter at the top. The upper band is decorated with twisted dragons. This shows that we have to do with an imperial *tsun*. The lower band is decorated with the figures of " gluttons ". The ancients knew an animal greedy of food and drink and which was himself devoured by other animals ; its was called *t'ao-t'ieh*. That is why the ancient wine vases are decorated with gluttons as a warning ; a profound idea. There are three of these animal heads to express the " triple offering ".

The whole *tsun* is turquoise-blue, whith mercury patina. The original colour of bronze has enti-

Si on le regarde au soleil, il a des reflets brillants de *fei-ts'ouei*. C'est là le résultat d'un séjour de plusieurs milliers d'années en terre, pendant lequel ce Tsouen s'est assimilé les meilleurs éléments du sol.

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rely disappeared. If looked at in the sun, it possesses brilliant reflections of *fei-ts'ui*. This is the result of a stay of several thousands of years in the ground, during which this *tsun* has assimilated the best elements of the soil.

PLANCHE XVII

Pot à eau Yi à dragon Tch'e, de la dynastie des Tcheou.

Ce 匜 Yi est haut de o m. 19 ; de la poignée au bec, il est long de o m. 385 ; le diamètre de la partie supérieure est de o m. 210.

D'après le *Chouo wen* de Hiu Chen, le Yi ressemble à une louche à potage 羹魁 (*keng-k'ouei*) et sert à verser de l'eau ; le *keng-k'ouei* est l'actuel 調羹 *tiao-keng*, dont la forme ressemble à celle du Yi [1]. La manière dont le mot est employé dans le *Tso tchouan* montre que le Yi servait cou-

1. [L'accord entre la description du *Chouo wen* et ce que nous appelons des Yi n'est pas si parfait. D'après le *Chouo wen*, le Yi comportait non pas une anse, mais un manche creux par où on faisait couler l'eau, et ce Yi à manche creux n'avait par suite, vraisemblablement, pas de bec. — P. P.]

PLATE XVII

« I » jug with Ch'ih dragon, of the Chou dynasty.

This 匜 *i* is o m. 19 high ; fron the handle to the spout, it is o m. 385 in length ; the diameter of the upper part is o m. 210.

According to Hsü Shen's *Shuo wen*, the *i* resembles a soup ladle 羹魁 (*keng-k'ui*) and serves to pour water. The *keng-k'ui* is the modern 調羹 *tiao-keng* ; its form truly resembles that of the *i* [1]. The manner in which the word is employed in the *Tso chuan* shows that the *i* was

1. [The agreement between the description of the *Shuo wen* and what we call *i* is not so complete. According to the *Shuo wen*, the *i* did not have the curved handle, but a holed handle, through which the water could flow, and the *i* with holed handle had, consequently, probably no spout. — P. P.]

ramment aux anciens à puiser de l'eau pour se laver, d'où ses dimensions et son bec. Sur la poignée de celui-ci est représenté un dragon sans corne (Tch'e); c'est qu'il était destiné à l'usage des anciens souverains. Le *Po kou t'ou* représente un vase absolument identique à celui-ci ; on voit par là que c'est un objet anciennement conservé dans les collections du palais Siuan-Houo (début du XII[e] siècle). Le vase est tout entier à patine de mercure, brillante, avec des verts de plusieurs nuances.

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commonly used by the ancients to bring water for their toilet ; whence its dimensions and its beak. On its handle is represented a hornless dragon (*ch'ih*), showing that it was meant for the use of the ancient Sovereigns. The *Po ku t'u* represents a vase absolutely identical with this, from which we see it to be an object originally preserved in the collection of the Hsüan-Ho palace (beginning of the 12th century). The vase has a brilliant mercury patina throughout the whole surface, with different shades of green.

PLANCHE XVIII

Foyer de bronze, de la dynastie des Tcheou.

Les hommes de la haute antiquité se nourrissaient de viande crue. C'est 炎帝 Yen-Ti qui, au temps de l'Empereur Jaune, fit pour la première fois un foyer. Mais, au début, on creusait seulement un trou dans le sol, on le remplissait de bois à brûler, et on plaçait la marmite par-dessus. Plus tard, sous les Tcheou, l'aménagement des maisons fut au complet, et on construisit le foyer dans la maison avec des briques et de la terre.

Ce foyer-ci est haut de o m. 145, long de o m. 46, large de o m. 24. Sur le dessus sont deux ouvertures rondes ; sur l'une se place une marmite sans couvercle (釜 Foù) ; sur l'autre, une marmite à couvercle (鍑 Foú), ainsi nommée à cause de ce couvercle [1]. En bas, sur le devant,

1. [Ces définitions du Foù et du Foú, où M. Tch'ou met *foù* en rapport étymologique avec 覆 *fou*, « couvrir », ne vont pas de soi. — P. P.]

PLATE XVIII

Bronze stove, of the Chou dynasty.

In the remotest antiquity, man ate raw meat. It was 炎帝 Yen-ti who, in the time of the Yellow Emperor, made the first hearth. In the beginning, a hole was dug in the ground and filled with firewood on which the pot was placed. Later on under the Chou the domestic arrangements were more complete, and the hearth was made inside the house with bricks and stones.

This stove is o m. 145 high, o m. 46 long, o m. 24 wide. On the top are two round openings. On one of these is placed a pot without lid (釜 *fù*); on the other a pot with a lid (鍑 *fú*) so called on account of the lid [1]. At the bottom is a rounded opening called " stove door " (*tsao-*

1. [These definitions of the *fù* and the *fú* in which M. Ch'u brings fù into etymological relation with 覆 *fu*, " to cover ", are not self evident. — P. P.]

est une ouverture arrondie qu'on appelle la « porte du foyer » (Tsao-Men) ; c'est par là qu'on introduisait le combustible. Au fond et en haut, il y a un petit tube, destiné au passage de la fumée ; il est placé comme dans les foyers actuels. Aujourd'hui la « porte du foyer » est le plus souvent sur le côté, au lieu d'être comme ici sur le devant ; nous pouvons donc connaître par cet objet la disposition des foyers antiques. Sur chaque côté sont deux anneaux. Il est déjà sorti de terre, au Chàn-Si et au Ho-Nan, un grand nombre de modèles de foyers en céramique, mais jusqu'ici les archéologues n'avaient jamais vu de foyer réel, ni en bronze.

Ce foyer est de patine verte avec des parties de lapis-lazuli.

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men), through which wood was put. At the rear, on the top, there is a small tube for the passage of the smoke. To-day the " stove door " is generally on the side, instead of being in front as here. We can tell thanks to this object what the disposition of the ancient stove was. On each side are two rings. A great many models of ceramic stoves have already been brought to light in the Shàn-si and Ho-nan provinces, but till now the archæologists had never seen a real stove, nor one made of bronze.

This stove is of green patina, with lapis-lazuli patches.

PLANCHE XIX

Tsouen en forme d'huître, de la dynastie Tcheou.

Les vases à vin des trois premières dynasties étaient appelés Tsouen, mais il y en avait beaucoup d'espèces. Ceux qui avaient un couvercle et une poignée étaient appelés 卣尊 Yeou-Tsouen ; ceux qui étaient ronds et hauts étaient dits Hou-Tsouen. Le présent vase est haut de o m. 095, long de o m. 305, large de o m. 20. Sur un des côtés se trouve une tête d'animal, à laquelle s'accrochait un anneau aujourd'hui perdu ; le côté opposé est plat. La forme du vase entier ressemble à celle d'un ramasse-poussière actuel. En se reportant aux livres anciens, on voit que c'est le « Tsouen en forme d'huître » (蜃尊 Tch'en-Tsouen) de la dynastie Tcheou [1]. D'après le *Tcheou li* (trad. Biot, I, 469), « dans tous les sacrifices aux montagnes, aux rivières, aux quatre régions, (le fonctionnaire

1. [« Huître » n'est qu'une équivalence approximative. Tch'en désignait un gros bivalve d'espèce indéterminée. Par ailleurs, je doute que nous ayons affaire à un vase à vin. La pièce a été trouvée avec le foyer de

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PLATE XIX

Oyster-shaped tsun, of the Chou dynasty.

The wine vases of the first three dynasties were called *tsun* ; but there were many kinds of them. Those which had a lid and a handle were called 卣尊 *yu-tsun* ; those which were round and high were termed *hu-tsun*. The present vase is o m. 095 high, o m. 305 long, o m. 20 wide. On one of the sides is the head of an animal to which was attached a ring now lost. The opposite side is flat. The shape of the whole vase resembles a modern dust-pan. Looking into ancient books, we see that it is the oyster-shaped *tsun* (蜃尊 *ch'en-tsun*) of the Chou dynasty [1]. According to the *Chou li* (translation Biot, I 469), " in all the sacrifices to mount a ins, to rivers, to the four regions (the official in charge of them), uses the vase (in the shape of) an oyster ".

1. [" Oyster " is only an approximative equivalent ; *ch'en* meant a big bivalve, of undetermined kind. On the other hand, I doubt that we have here to do with a wine vase. The piece has been found together with the

qui en est chargé) se sert du vase (en forme) d'huitre. » Le *San li t'ou* représente ce vase en forme d'huitre. C'est que, sous les Tcheou, la capitale était loin de la mer, les mollusques marins étaient difficiles à obtenir ; de là leur emploi pour rendre hommage aux montagnes, aux rivières et aux points cardinaux. Le présent vase est donc important au point de vue archéologique.

La pièce est d'un vert jaunâtre assez brillant, et bleuâtre dans les couches profondes ; la couleur primitive du bronze a complètement disparu sous cette belle patine.

bronze et est en effet d'un travail très analogue. J'inclinerais plutôt à y voir une pelle à ramasser les cendres du foyer. — P. P.]

Buffle debout, de la dynastie Tcheou.

Hauteur 0 m. 14, longueur 0 m. 26.

Cet animal est le pendant de celui qui appartient à M. Stoclet et qui est reproduit dans « Les animaux dans l'art chinois », Pl. I. Les dimensions sont absolument les mêmes. Mais, alors que celui de M. Stoclet a la tête tournée à droite, celui-ci tourne la tête à gauche. Les deux font donc certainement une paire. Toutefois le support qui existe encore sur le dos de l'animal dans l'exemplaire de la collection Stoclet manque à celui-ci.

La patine est verdâtre avec des taches de rouge.

The *San li t'u* represents this vase in the shape of an oyster. Under the Chou, the capital was far from the sea and molluscs were difficult to get. That is why they were used for doing homage to the mountains, the rivers and the cardinals point. The present vase is thus important from an archæological point of view.

The piece is of a yellowish green fairly brilliant and bluish under the surface; the primitive colour of bronze has completely disappeared under this fine patina.

bronze stove and is really of a very similar make. I would rather see in it a shovel for gathering the ashes of the stove. — P. P.

Buffalo standing, of the Chou dynasty.

Height 0 m. 14, length 0 m. 26.

This animal is a companion to the one owned by Mr. Stoclet, and which has been published in " Les animaux dans l'art chinois ", Pl. I. The dimensions are absolutely identical. But the one owned by Mr. Stoclet has its head turned to the right, whilst this one turns it to the lefts. The two certainly make a pair. Nevertheless, the support which is still existing on the back of the animal in the specimen of the Stoclet collection, is missing on this one.

The patina is greenish, with red patches.

PLANCHE XX

Cloche des descendants de Chen-Kong, de la dynastie des Tcheou.

Les anciens bronzes portent très souvent l'indication qu'ils ont été fabriqués par les descendants de tel et tel, mais sans donner le nom de ces descendants ; c'est aussi le cas ici. La cloche, y compris la poignée, est haute de 0 m. 57 et large de 0 m. 32. Elle porte une longue inscription de 261 mots, en beaux caractères anciens. Cette inscription commence par une date de jour et de mois, « le quatrième mois du calendrier royal, au jour Keng-Chen », mais sans indication d'année. Mention est faite de 溫 Wen (dans la région du Ho-Nan-Fou actuel) et de 召陵 Tchao-Ling. L'auteur se dit petit-fils de 申公 Chen-Kong, et fils de 欒叔 Louan-Chou. Par l'ordre du souverain des Tcheou, il a mené des troupes pour mettre fin aux troubles à l'Est de 畢 Pi. Partout

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PLATE XX

Bell of the descendants of the Shen-Kung, of the Chou dynasty.

The old bronzes very often bear an indication that they were made by the descendants of so and so, without giving the names of the authors themselves; such is the case here. The bell (including the handle) is 0 m. 57 high, and 0 m. 32 wide. It bears a long inscription of 261 words, in fine old characters. This inscription begins with a date of day and month, " the fourth month of the royal calendar, on the " *Keng-shen* day ", but without any indication of the year. Mention is made of 溫 Wen (in the region of the present Ho-Nan-Fu) and of 召陵 Chao-Ling. The author calls himself the grandson of 申公 Shen-Kung and the son of 欒叔 Luan-Shu. On the order of the sovereign of the Chou, he led troops in order to end the troubles in the east of 畢 Pi. Wherever he went, he was victorious, and the sovereign of the Chou said that his deeds

où il est allé, il a remporté la victoire, et le souverain des Tcheou a dit que ses exploits continuaient dignement ceux du roi Wen et du roi Wou. Le souverain a ordonné au grand historiographe nommé 頵 Kiun (ou Yun) d'enregistrer ses hauts faits ; il lui a donné des vêtements, des armes, des harnachements (玄衮.赤芾.琱戈.攸勒.韋履); il a fait annoncer son triomphe dans le Temple ancestral de la dynastie, et a rappelé qu'antérieurement le grand-père de l'auteur avait déjà soutenu la dynastie en réprimant une insurrection. Aussi le petit-fils de Chen-Kong et fils de Louan-Chou a-t-il fabriqué cette cloche en témoignage des honneurs qui lui ont été rendus, et pour que ses descendants la conservent précieusement à jamais.

Cette cloche, partiellement à patine verte, est de dimensions exceptionnelles. D'après le *Tcheou li*, les grands fonctionnaires pouvaient employer seize petites cloches. Mais celle-ci est une cloche d'une autre classe, et dont l'usage réservé à l'Empereur ne peut avoir été accordé à un particulier qu'à raison de mérites spéciaux.

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were a worthy continuation of those of King Wen and King Wu. The sovereign ordered the great historiographer called 頵 Chün (or Yün) to write down his great deeds and gave him garments, arms and harness (玄衮.赤芾.琱戈.攸勒.韋履). He had his triumph proclaimed in the ancestral temple of the Dynasty and he also recalled the help previously given by the author's grandfather who helped the dynasty by repressing an insurrection. The grandson of Shen-Kung and son of Luan-Shu made this bell so that it should bear testimony to the honours bestowed upon him and that it might be preserved by his descendants for ever.

This bell, partially covered with a green patina, is of exceptional size. According to the *Chou li*, high officials could use sixteen small bells, but this one is of another class, the use of which being specially reserved for the emperor could not be granted to a private person except for special merit.

PLANCHES XXI-XXII

Cloche à décor de dragons, de la dynastie Tcheou.

Cette cloche est haute de 0 m. 29, large de 0,285 ; le manche, en partie brisé, a 0 m. 65. Elle est couverte de dragons entrelacés, avec deux boutons en saillie, qui sont les yeux du dragon principal. L'intérieur de la cloche est également orné de dragons gravés en creux. Une telle cloche est jusqu'ici unique, et n'est mentionnée ni par le *Po kou t'ou*, ni par les autres ouvrages d'archéologie. Dans les œuvres de 賈誼 Kia Yi (201-169 av. J.-C. ?), il est dit que lorsque 伍子胥 Wou Tseu-Siu (VIe et Ve siècle av. J.-C.) fit campagne contre le pays de Tch'ou et entra à 郢 Ying, il y prit la « cloche aux dix dragons » de ce pays. Cette cloche-ci est entièrement couverte de dragons, et représente une tête de dragon ; serait-ce la « cloche aux dix dragons » de l'antiquité ?

La patine est vert-malachite avec des parties bleu-turquoise. Cette cloche est très lourde, et le métal en est d'un jaune brillant ; de l'or est sûrement entré dans la fonte. C'est un objet des plus rares.

PLATES XXI-XXII

Dragon-decorated Bell, of the Chou Dynasty.

This bell is 0 m. 29 high, 0 m. 285 wide; the handle, partially broken, is 0 m. 65 in length. The bell is covered with twisted dragons; two projecting knobs are the main dragon's eyes. The interior of the bell is equally adorned with incised dragons. Such a bell is so far unique; it is mentioned neither by the *Po ku t'u*, nor by the other works of archaeology.

In the writings of 賈誼 Chia I (201-169 B. C. ?) it is said that when 伍子胥 Wu Tzŭ-hsü (6th and 5th centuries B. C.) made a campaign against the country of Ch'u and entered 郢 Ying, he took the " bell of the ten dragons " from this country. Our bell is entirely covered with dragons and represents a dragon's head; can it be the bell of the ten dragons?

The patina is malachite-green with parts of turquoise blue. The bell is very heavy and the bronze itself is of a brilliant yellow, so that gold has surely entered into the cast. It is a very rare piece.

PLANCHE XXIII

Cloche de Kong-Wei de Tch'ou, de la dynastie Tcheou.

Cette cloche est haute au total, manche compris, de o m. 895, large de o m. 395; le manche est long de o m. 37. Sur les parties de la cloche appelées 鉦 *tcheng*, il y a deux fois l'inscription :

楚公為自作寶大林鐘孫子其永寶

" Kong Wei de Tch'ou a fait cette grande cloche Lin-Tchong précieuse [1]. Que ses descendants la conservent à jamais précieusement. » Kong Wei doit être le nom d'un homme de l'ancien pays de Tch'ou, dont le prince avait pris le titre de Roi, et qui répond en gros au Hou-Pei et au Hou-Nan actuels. Lin-Tchong est le nom d'un des tubes musicaux, et indiquerait la note que donnait la cloche.

Cette cloche est très grande, sa poignée est également plus grande qu'à l'ordinaire, elle doit avoir

1. [Le déchiffrement de la fin de ce membre de phrase est très douteux. — P. P.]

PLATE XXIII

Bell of Kung Wei of Ch'u, of the Chou Dynasty.

This bell (handle included) is o m. 895 high; o m. 395 wide; the handle is o m. 37 long. The parts of the bell called 鉦 *cheng* bear twice this inscription :

楚公為自作寶大林鐘孫子其永寶

" Kung Wei of Ch'u made this precious *lin-chung* big bell [1]. May his descendants keep it carefully and for ever ". Kung Wei must be the name of a man of the old country of Ch'u, whose prince had assumed the title of king and which nearly corresponds with the modern Hu-pei and Hu-Nan. *Lin-chung* is the name of one of the musical tubes, and would indicate the note given by the bell.

1. [The reading of the latter part of this sentence is very doubtful. — P. P.]

été fabriquée dans des conditions spéciales. Entre les deux parties appelées 舞 *wou*, il y a des ornements de dragons entrelacés.

La cloche est vert de mousse, de teinte plus ou moins foncée suivant les endroits; il y a aussi des parties bleu lapis-lazuli et même noires. Par ses dimensions et par l'excellence de sa fabrication, cette cloche doit être classée en tête de toutes celles qui ont été exhumées en Chine.

This bell is very large, its handle is also bigger than usual. It must have been made in special conditions. Between the two parts called 舞 *wu*, there are ornaments of twisted dragons.

The bell is of moss-green patina, with occasionally lapis-lazuli and black splashes. Some parts are black. Its dimensions and the excellency of its fabrication class this bell at the head of all those that have been unearthed in China.

PLANCHE XXIV

Cloche à ornements floraux, de la dynastie Tcheou.

Hauteur (poignée comprise) o m. 33, largeur o m. 185. Chaque côté porte trois rangées de six boutons en forte saillie. Sur le renflement de la poignée, autour de la cloche et entre les lignes des boutons, règnent des ornements floraux en relief d'une finesse et d'une délicatesse exquises, dont la photographie ne donne qu'une idée très approximative. Le haut de la cloche est décoré de dessins en creux d'un style plus large.

Toute la cloche est d'une admirable patine verte « peau de pastèque » (koua-p'i-lu).

PLATE XXIV

Bell with floral ornament, of the Chou dynasty.

Height (including the handle) o m. 38; width o m. 185.

Each side bears three rows of six high relief knobs. On the embossed part of the handle, round the bell and between the rows of knobs, are floral decorations in low relief of an exquisite finesse and delicatesse, of which the reproduction gives only an approximate idea. The top of the bell is decorated with deep designs of a larger style.

The whole bell is covered with an admirable « water-melon » green patina (*kua-p'i-lü*).

PLANCHE XXV

Cloche à Hydres, de la dynastie des Tcheou.

Hauteur totale o m. 43, diamètre o m. 205.

La cloche est décorée de dix-huit boutons en saillie; entre les rangées de ces boutons sont des décors d'hydres ou dragons sans corne (Tch'e) qui ont chacun deux têtes (une à chaque extrémité du corps). La gravure de ces hydres est des plus fines. Le décor du haut de la cloche est analogue, mais à traits plus larges. La poignée, également décorée, comporte en outre une petite anse latérale figurant une tête de tigre (?).

PLATE XXV

Bell with Hydras, of the Chou dynasty.

Total height o m. 43, diameter o m. 205.

This bell is decorated with 18 knobs in high relief; between the lines of these knobs are decorations of hydras, or hornless dragons. Each has two heads (one at each end of the body).

The carving of these hydras is of the finest execution.

The decoration on the top of the bell is similar to the body, but of larger style.

The handle, also decorated, has a second smaller handle situated laterally near the shoulder, representing a tiger head (?).

PLANCHE XXVI

Cloche à poignée cannelée, de la dynastie Tcheou.

Hauteur (poignée comprise) o m. 35, largeur o m. 125.

Cette cloche est d'une forme très élégante et d'un décor très sobre. Le corps même de la cloche est absolument nu. La poignée est finement cannelée. Sur le dessus de la poignée se trouve une ornementation à lignes recourbées, en quatre segments. Le bas de la cloche a un bord renflé à l'intérieur, avec quatre arêtes saillantes qui vont de la base au sommet à l'intérieur de la cloche.

La patine, très uniforme et lisse, est d'un vert-olive un peu pâle, se rapprochant par endroits du vert « peau de pastèque ».

PLATE XXVI

Bell with fluted handle, of the Chou dynasty.

Height (including handle) o m. 35, width o m. 125.

The bell has a very elegant form with a very simple decoration.

The body itself of the bell is absolutely bare. The handle is finely fluted. On the top of the bell is an ornamentation of curled lines in four lobes. Inside the bell is a raised edge near the base, with four relief ribs running from the base to the top: The patina, very uniform and smooth, is of a rather pale olive green, approaching in certain parts to water melon green.

PLANCHE XXVII

Coupe Tsio, de la dynastie Tcheou.

Hauteur o m. 205, longueur maxima o m. 18.

Cette coupe à vin est du type Tsio. La décoration comporte deux masques T'ao-t'ie très stylisés. Un caractère est gravé sous l'anse, et une inscription de six caractères à l'intérieur, le long du montant droit.

Patine verte, avec des parties noires et quelques reflets rouges.

Coupe Tsio, de la dynastie Tcheou.

Hauteur o m. 21, longueur maxima o m. 18.

La forme est la même que pour la coupe précédente, mais le décor est à traits plus forts ; un caractère est gravé sous l'anse. La coupe a une très belle patine d'un rouge éclatant avec des parties vertes.

PLATE XXVII

Chio tripod cup, of the Chou dynasty.

Heigt o m. 205, maximum length o m. 18.

This cup for wine is the type called *chio*. The decoration consists of two masks of *t'ao-t'ieh*, in a very stylised form. One character is engraved under the handle, and there is an inscription of six characters inside the cup, along the right shaft.

Green patina, parts in black and some red reflects.

Chio tripod cup, of the Chou dynasty.

Height o m. 21, maximum length o m. 18.

This cup has the same general form as the preceding one, but the decoration is of a larger design. One character is engraved under the handle.

The cup has a very brilliant patina of red, with partial green splashes.

PLANCHE XXVIII

Hou aux « quatre animaux merveilleux », de la dynastie Ts'in.

Ce 壺 Hou est haut de o m. 28, l'orifice a o m. 117 de diamètre, la circonférence de la panse est de o m. 68.

Le corps du vase est sans décoration, à l'exception d'un double bandeau. A la partie inférieure sont gravées des figures de deux dragons, d'une grue, d'un ours, d'un tigre. Le dessin en est d'une simplicité archaïque, et ressemble un peu aux peintures des chambrettes du Wou-Leang-Ts'eu (Chantong ; IIe siècle ap. J.-C.).

Dans l'antiquité, on considérait le dragon, la grue, l'ours et le tigre comme des animaux qui n'apparaissaient pas constamment, et on les appelait « les quatre êtres merveilleux ».

C'est pourquoi ils sont gravés sur le bas du vase, pour exprimer l'idée du renom et d'un haut rang.

D'après le *San li t'ou*, le Hou contient un Hou 斛 ,c'est un vase à vin. Dans le *Livre des*

PLATE XXVIII

Hu with the " four wonderful animals ", of the Ch'in dynasty.

This 壺 *hu* is o m. 28 high ; the diameter of the orifice is o m. 117 ; the circumference at the middle is o m. 68. The body of the vase has no decoration except a double band. On the lower part, figures of two dragons, a crane, a bear and a tiger are engraved. Their design is of antique simplicity and somewhat resembles the pictures in the stone chambers of Wu-liang-tz'ŭ (in Shantung ; 2nd century A. D.). In ancient times the dragon, the crane, the bear and the tiger were considered animals which did not appear constantly, and they were called " the four wonderful animals ". That is why they are engraved on the lower part of the vase, to express the idea of renown and high rank.

According to the *San li t'u*, the *hu* holds a *hu* 斛 ; it is a wine vessel. In the *Book of Verses*, mention is made of " a hundred *hu* of clear wine ». This vase has a small orifice and a big belly ; it is a wine vessel of that time.

Vers, il est question de " cent Hou de vin clair ". Ce vase-ci est à petit orifice et à grosse panse ; c'est un vase à vin du temps.

Le vase entier est à patine de vernis noir. En plus de mille ans de séjour dans la terre, il n'a subi aucun dommage, ce qui suffit à montrer l'excellence des matériaux et de la fonte. Il y a encore là une tradition héritée des Tcheou, à laquelle aucun vase fabriqué sous les deux dynasties Han ne pourrait atteindre.

The whole vase has a black varnish patina. After a stay of over a thousand years in the ground it has suffered no injury, which is sufficient to show the great purity of the metals used in the casting. It is still the tradition inherited from the Chou dynasty ; no vase made under the two Han dynasties could reach such perfection.

PLANCHE XXIX

Grand Lei, de la dynastie Han.

Le 罍 *lei* était un ustensile à contenir du vin. Le *Chouo wen* de Hiu Chen écrit 櫑 ou 罍 avec ce commentaire : « C'est un vase à vin (Tsieou-Tsouen) avec des yeux de tortue (*kouei-mou*). On y grave des dessins de nuages et de tonnerre, pour exprimer l'idée d'inépuisable. » Le *Livre des Vers* (Legge, *Chinese Classics*, IV, 8) dit : « Je vais maintenant verser une coupe de ce Lei doré. » D'après le *Tcheou li*, on se servait de Lei pour faire honneur aux hôtes ; le commentaire du *Eul ya* dit que le Lei a la forme d'un vase Hou, et que les grands contiennent un Hou (dix boisseaux).

Le présent Hou, avec son couvercle, est haut de o m. 30 ; la circonférence, à la panse, est de 1 m. 02, le diamètre de l'orifice est de o m. 19. Sur le couvercle, il y a six disques en légère saillie ; il y en a huit en bas ; c'est ce que les anciens appelaient des dessins du tonnerre. Sur le couvercle, est une sorte de couronne portée par six têtes d'animaux. Tout le vase est décoré de figures rectangulaires de

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PLATE XXIX

Great Lei, of the Han dynasty.

The 罍 *lei* was a vessel for holding wine. The *Shuo wen* of Hsü Shen writes 櫑 *lei* or 罍, with this commmentary : " It is a wine jar (*chiu-tsun*) with tortoise eyes (*kui-mu*). It is engraved with designs of clouds and lightnings to express the idea of inexhaustibility. " The *Book of Verses* (Legge, *Chin. Classics*, IV, 8) says : " I am now going to pour forth a cup from this gilded *lei* ". According to the *Chou li*, the *lei* were used for doing honour to guests ; the commentary on the *Er ya* says that the *lei* is in the shape of a *hu* vase and that the large ones hold a *hu* (or ten bushels).

The present *lei*, with its lid, is o m. 30 high ; at its largest has a circumference of 1 m. 02 ; the diameter of the orifice is o m. 19. On the lid there are six disks slightly projecting, and eight round the bottom of the vase. That is what was called by the ancients « designs of thunderbolts ». On the

monstres 夔 K'ouei et de dragons. Autour de la partie la plus large, il y a un double bandeau. La facture est admirable et on a le couvercle original, ce qui se rencontre très rarement. Le vase est tout à patine de mercure, d'une couleur brunâtre avec des fonds verts ; il n'a aucun défaut de fonte.

L'*Histoire des Han* dit que le prince Hiao de Leang 梁孝王 avait un Lei qui valait mille onces d'or, et il avertissait ses descendants de le bien conserver. La facture de ce Lei est tout à fait extraordinaire. Sommes-nous en présence du Lei appartenant au prince Hiao de Leang ?

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lid is a sort of crown borne by six animal's heads. The whole vase is decorated with rectangular figures or *K'ui* monsters 夔 and dragons. Round the largest part there are two bands. The execution is admirable and we possess the original lid, which occurs vere rarely. The vase has a mercury patina throughout, of a brownish colour with green background. There is no flaw in the casting.

The *History of the Han* says that Prince Hsiao of Liang 梁孝王 had a *lei* which was worth a thousand ounces of gold, and he warned his descendants to keep it carefully. The facture of this *lei* is quite extraordinary. Have we here the *lei* belon ging to Prince Hsiao of Liang ?

PLANCHE XXX

Hou à large panse, de la dynastie des Han.

Hauteur, o m. 14, diamètre o m. 14, diamètre de l'orifice o m. 075. Ce petit vase, malheureusement endommagé d'un côté, est d'une forme extrêmement gracieuse, avec sa large panse reposant sur trois pieds minuscules, son col légèrement évasé, et les deux anses à trous très étroits où passait une cordelette ou une chainette.

La patine, admirable, est un mélange de vert peau de pastèque et de bleu lapis-lazuli.

PLATE XXX

Hu with large globular body, of the Han Dynasty.

Height o m. 14, diameter o m. 14, diameter of the mouth o m. 075. This small vessel, unfortunately damaged on one side, has the most graceful form, with its large body resting on three little feet, its neck slightly evading and the two handles, each of which is pierced with a narrow hole to let through a small cord or chain.

The patina is unusually fine and brilliant, of water melon green colour on the principal parts of the surface, with the remaining lapis-lazuli blue.

PLANCHE XXXI

Vase tripode à décor de K'ouei, de la dynastie Han.

Dans la très haute antiquité, les gens se nourrissaient de viande crue. Fou-Hi enseigna le premier à cuire les aliments. Parmi les ustensiles qui y servirent, on considère que le tripode (鼎 Ting) est le plus ancien. Le Fils du Ciel avait neuf tripodes, les seigneurs féodaux cinq, les grands officiers trois ; dans ces tripodes on mettait la viande de bœuf, de mouton, de porc. Les Ting étaient à trois pieds, pour pouvoir être mis sur le feu ; quand la viande était cuite, on pouvait les servir à table, aussi bien dans les sacrifices que dans les banquets.

Le Ting, couvercle compris, est haut de o m. 32, le diamètre de l'orifice est de o m. 31, la panse a 1 m. 07 de circonférence. Il est entièrement couvert de fins motifs de K'ouei [1], qui se succèdent ou s'opposent. Le couvercle a trois anneaux, qui permettent de l'enlever. Sur les côtés du Ting sont deux

1. [Le K'ouei est un être fabuleux vaguement analogue au dragon, mais n'ayant qu'une patte. — P. P.]

PLATE XXXI

Tripod vase with K'ui decoration, of the Han dynasty.

In the remotest antiquity, people fed on raw meat. Fu-hsi first taught the cooking of aliments. Among the utensils which were used therefore, it is considered that the tripod (鼎 *ting*) is the most ancient. The Son of Heaven had nine tripods, the feudal lords five, the high officials three. In these tripods beef, mutton and pork were put. The *ting* had three feet to allow them to be placed on the fire ; when the meat was cooked, they could be used at table for sacrificial and banquetting purposes alike.

This *ting*, including the cover, is 32 cm. high ; the diameter of the opening is o m. 31, and the belly has 1 m. 07 in circumference. It is wholly covered with fine *K'ui* motifs [1] which follow or con-

1. [The *K'ui* is a fabulous being somewhat similar to the dragon, but having only one foot. — P. P.]

anses servant à tenir le Ting quand on le présentait. Le vase est à patine de mercure, de couleur vert pâle ; cela tient à l'argent qui a été mêlé à la fonte. Beaucoup de parties ont pris une couleur rouge-brun. C'est certainement là un objet de fabrication officielle.

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front one another. The lid has three rings which enable it to be lifted. On the sides of the *ting* are two handles serving to hold it when presented. The vase has a mercury patina of a greenish colour; it is due to the silver which was mixed with the alloy at the time of the cast. Many parts have taken a dark brown colour. Clearly an object of official fabrication.

PLANCHE XXXII

Vase à eau chaude de la princesse de K'iu-Yang, de la dynastie Han.

Ce vase à eau chaude (温壺 Wen-Hou) est haut de o m. 37 et a o m. 73 de circonférence. Dans le bas, est une inscription 曲陽家銅温壺重八斤十兩第三.

« Vase à eau chaude en bronze de la princesse de K'iu-Yang. Poids : huit livres dix onces. Numéro trois. » K'iu-Yang porte aujourd'hui encore le même nom, et se trouve dans la partie occidentale du Tche-Li. Sous les Han on appliquait le mot 家 *kia*, « famille », aux villes constituant l'apanage des princesses impériales. Les Wen-Hou contenaient l'eau chaude destinée à la toilette ; c'est pourquoi l'orifice est petit pour que l'eau ne se refroidisse pas vite. « Numéro trois » est un numéro d'ordre.

Le vase a peut-être été doré ; il a, par endroits, une patine rouge produite par le séjour en terre.

PLATE XXXII

Hot-water pot of the princess of Ch'ü-Yang, of the Han dynasty.

This hot-water pot (温壺 *wen-hu*) is o m. 37 high and has o m. 73 in circumference. At the bottom is an inscription: 曲陽家銅温壺重八斤十兩第三.

" Bronze hot-water pot of the Princess of Ch'ü-yang. Weight : eight pounds, ten ounces. Number three". Ch'ü-yang has to-day the same name and lies in the eastern part of Chih-li. Under the Han, the word 家 *chia*, " family ", was applied to towns given in appanage to the imperial Princesses. The *wen-hu* held the hot water destined for the toilet; that is why the orifice is small, to prevent the water from cooling too quickly. " Number three " is a serial number.

The vase may have been gilt ; it has in places a red patina caused by a long stay in the ground.

PLANCHES XXXIII-XXXIV

Tsouen à incrustations de malachite, de la dynastie Han.

Hauteur o m. 26, diamètre o m. 20, diamètre de l'orifice o m. 098.

Le vase a deux anses mobiles très finement gravées, accrochées comme d'ordinaire à un masque d'animal. La décoration est divisée en sept registres, y compris le registre du pied. Cette décoration, sauf pour le registre du pied, est formée essentiellement d'animaux stylisés, disposés de biais et se coupant à angles droits. Trois des registres sont à dessins plus larges, avec incrustations de malachite. Entre eux sont trois registres, où les incrustations sont obtenues avec une sorte de pâte, et au moyen de minces fils de cuivre qui ont été martelés en lignes parallèles dans les creux. Le type et le système d'incrustation apparentent étroitement ce vase à celui de la collection Meyer qui a été reproduit en 1916, sous le n° 339, dans le *Catalogue of an exhibition of early Chinese pottery and sculpture* publié par le Metropolitan Museum de New York en 1916.

PLATES XXXIII-XXXIV

Tsun with incrustations of malachite, of the Han dynasty.

Height o m. 36, diameter o m. 20, diameter of the mouth o m. 098. The vase has two movable handles, finely engraved, and hooked as usual on an animal mask.

The decoration, together with the one on the foot, is divided into seven bands. Except for the band on the foot, the decoration is principally formed by stylized animals, disposed in slopes and cut on straight angles. Three of these bands are decorated with larger designs and inlaid with malachite.

Between these bands are three others where the incrustations are obtained by a certain kind of paste (composition) and also by means of fine copper wires hammered in parallel lines in the cavity.

The style and the type of the incrustations of this vase are closely related to the vase of the E. Meyer collection which was reproduced in 1916, under N° 339, in the *Catalogue of an Exhibition of early Chinese pottery and sculpture*, published by the Metropolitan Museum of New York in 1916.

PLANCHE XXXV

Hou doré, de la dynastie Han.

Ce Hou est haut de o m. 44, diamètre de l'orifice o m. 155, circonférence de la panse 1 m. 08. Les Hou servaient aux anciens à contenir de l'eau ou du vin ; ils étaient d'usage constant au Palais Impérial sous les Han. Le présent Hou est entièrement doré, et parfaitement intact ; la couleur jaune est éclatante. Le commentaire de l'*Histoire des Han* cite le 漢舊儀 *Han kieou yi* (1er siècle après J.-C.) disant que, pour servir la cuisine impériale, les cuisiniers emploient des vases dorés [1]. A en

1. [釦器 K'eou k'i. On interprète généralement K'eou k'i par « vase à orifice doré » ou « vase à orifice serti d'un bandeau d'or (ou d'argent) ». Cette explication est à priori un peu suspecte, parce qu'elle semble trop servilement copiée sur la composition graphique du mot K'eou, « métal » + « bouche ». Mais je ne sais sur quoi s'appuie M. Tch'ou pour lui en substituer une autre. En fait, il y a à l'Art Institute de Chicago un vase provenant du Palais Oriental (Palais du Prince héritier ?) des Han ; il est entièrement doré. — P.P.]

PLATE XXXV

Gilt Hu, of the Han dynasty.

This *hu* is o m. 44 high ; diameter of the orifice o m. 155 ; circumference of the body 1 m. 08.

Hu were employed by the ancients for holding water or wine ; they were constantly in use at the Imperial Palace under the Han.

The present *hu* is entirely gilt, and perfectly intact, its yellow colour is brilliant. The commentary on the *History of the Han* dynasty quotes the 漢舊儀 *Han chieu i* (Ist century A. D.) saying that for serving up the imperial meals, the cooks employed gilt vases [1]. Judging from the workman-

1. [釦器 *K'ou-ch'i. K'ou-ch'i* is generally interpreted by " vase with a gilt aperture " or " vase with an aperture inset with a gold or silver band ». This explanation is a priori a little suspicious, because it seems to follow too slavishly the graphic composition of the word *k'ou* : " metal " + " mouth ". But I do not know on what ground Mr. Ch'u bases his opinion to substitute another explanation. In fact, there is in the Art institute of Chicago a vase coming from the " Oriental Palace " (the palace of the " Crown Prince " ?) of the Han which is entirely gilt. — P. P.]

juger par le travail de ce vase, je soupconne que c'est là un objet à l'usage de l'empereur. Le *Si ts'ing kou kien* (XVIIIe siècle) a reproduit un vase absolument semblable à celui-ci. Le présent Hou pourrait donc bien avoir fait partie des collections impériales des Ts'ing ; il n'en serait que plus précieux.

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ship of this vase, I believe that we have here an object for the use of the Emperor. The *Hsi ch'ing ku chien* (XVIIIth century) has reproduced a vase absolutely similar to this one. The present *hu* may thus have belonged to the imperial collections of the Ch'ing. It would be the more precious consequently.

PLANCHE XXXVI

Miroir aux raisins, de la dynastie T'ang.

Diamètre o m. 21.
Ce type est bien connu, et ne comporte jamais d'inscription. L'intérêt de la présente pièce est dans sa dimension, la finesse de son exécution et sa parfaite conservation. La patine est celle dite « patine de mercure » et ressemble absolument à de l'argent ; de l'argent a dû entrer dans la fonte.

Poignée-support, de la dynastie Han.

Longueur o m. 22, largeur o m. 10.
Cette pièce exceptionnelle est d'usage assez énigmatique. La tige en crochet est mobile sur la poignée.

PLATE XXXVI

Mirror with grapes, of the T'ang dynasty.

Diameter o m. 21.
This type is well known, but never bears any inscription. The interesting features of this beautiful work of art are to be found in its size, its fine execution, and its perfect preservation.
The patina is very fine and is called " patina of mercury " ; it looks exactly like silver, and some must have been mixed in the casting.

Buckle, of the Han dynasty.

Length o m. 22, width o m. 10.
The use of this exceptional piece is rather mysterious. The stem with the hook is movable on the

La décoration, très élégante et fine, était obtenue par de profondes incrustations d'une pâte dont il ne reste que quelques traces. La patine est vraiment admirable, et donne l'impression du jade archaïque.

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handle. The decoration, very elegant and fine, was obtained by deep incrustations of a certain composition (paste) of which only some traces remain now.
The patina is really admirable and this bronze gives the impression of archaic jade.

PLANCHE XXXVII

Miroir Chang-Fang, de la dynastie Ts'in.

Les miroirs s'appelaient anciennement 鏡 King ou 鑑 Kien. On les fondait en bronze, puis on les polissait avec un mélange à base de mercure.
Ce miroir a o m. 205 de diamètre. Le registre le plus voisin du centre est carré et porte la série des douze caractères cycliques (Tch'en), en écriture « sigillaire ». Le second registre est orné de dragons sans cornes (Tch'e) et de tigres, avec huit boutons (*jou*) en saillie dans le champ. Le troisième registre porte une inscription de trente-quatre mots en écriture Li :

尚方作.鏡真大巧.上有仙人不知老.渴

飲玉泉飢食棗.浮遊天下敖四海.壽敝

金石兮

« Le Chang-Fang a fait ce miroir avec grande habileté. En haut, sont les Immortels qui ne connaissent pas la vieillesse. Altérés, ils boivent à la source de iade ; affamés, ils mangent des jujubes. Sans gêne ils

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PLATE XXXVII

Shang-fang mirror, of the Ch'in dynasty.

Mirrors were formerly called 鏡 *ching* or 鑑 *chien*. They were cast in bronze and polished with a mercury alloy.
This mirror has o m. 205 in diameter. The register nearest to the centre is square and has the series of the twelve cyclical characters (*ch'en*) in sigillar writing. The second register is decorated with

parcourent le monde et errent sur les quatre mers. Leur longévité passe (la durée) du métal et de la pierre [1]. »

Le Chang-Fang était dès les Ts'in le nom d'une administration du palais, chargée de fabriquer les objets à l'usage impérial. Sous les Ts'in, l'Empereur se plaisait fort aux choses des génies et des immortels. Ce miroir était pour l'usage de l'Empereur. C'est pourquoi le Chang-Fang y a mis une invocation aux Immortels qui ne connaissent pas la vieillesse, comme une flatterie à l'adresse de l'Empereur.

Tout le miroir est à patine de mercure, couleur de vernis noir ; c'est que de l'argent a été mêlé au métal lors de la fonte. Ce miroir est un des objets des Ts'in les plus remarquables.

1. [Cette inscription est une des inscriptions usuelles sur les miroirs du Chang-Fang. Comme il arrive souvent, elle est ici incomplète ; il manque deux mots au dernier vers. Cf. par exemple d'autres miroirs analogues dans le *Kin che so*, section des objets en métal, ch. 6, où il y en a cinq spécimens, et dans le *Kou king t'ou lou* de M. Lo Tchen-yu, 2e ch., ff. 10-11. Mais ces miroirs sont généralement rapportés aux Han et non aux Ts'in — P. P.]

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hornless dragons (*ch'ih*) and tigers, and has eight knobs. The third register bears an inscription of 34 words in *li* writing :

尚方作鏡真大巧上有仙人不知老渴

飲玉泉飢食棗浮遊天下敖四海壽敝

金石兮

" The Shang-fang made this mirror with great skill. Above are the Immortals who never grow old. When thirsty, they drink out of the Jade Spring ; when hungry, they eat jujubes. They travel freely all over the world and they rove on the four seas. Their longevity outlasts that of metal and stones [1]. »

The Shang-fang was, as far back as the Ch'in, the name of an administration of the palace whose function was to make objects for the use of the Emperor. Under the Ch'in, the Emperor delighted in genii and immortals. This mirror was for the Emperor's use. That is why the Shang-fang has engraved an invocation to the immortals who are always young as a flattery to the Emperor.

The whole mirror has a mercury patina of a black varnish colour, owing to the silver that was added to the metal at the casting. This mirror is one of the most remarkable objects of the Ch'in.

1. [This inscription is one of the usual inscriptions on the Shang-fang mirrors. As is very often the case, it is not complete here. Two words are lacking in the last verse. Cf. for instance other similar mirrors in the *Chin shih so*, section of metal objects, chapt. 6, where there are five similar specimens, and in the *Ku ching t'u lu* of Mr. Lo Chen-yü, 2nd Chapter, 10-11. But those mirrors are generally attributed to the Han and not to the Ch'in. — P. P.]

Miroir aux oiseaux et aux licornes, de la dynastie T'ang.

Diamètre o m. 23.

Ce miroir, en " fleur de châtaignier d'eau " à huit segments, est décoré d'oiseaux et de licornes (K'i-lin). Sa patine est la " patine de mercure " donnant l'apparence de l'argent, avec d'importantes parties de patine verte.

Mirror with birds and unicorns, of the T'ang dynasty.

Diameter o m. 23.

This mirror, in the form of the flower of the water chestnut, is eight lobed, decorated with birds and unicorns (*ch'i-lin*).

The patina is the " mercury patina " giving the appearance of silver, with large parts in green patina.

PLANCHE XXXVIII

Miroir aux Canards, de la dynastie Han.

Sous les Han, les miroirs de bronze étaient ronds ou carrés. Celui-ci est rond et a o m. 193 de diamètre. Il est en forme de fleur de châtaignier d'eau (Ling-Houa), avec huit segments. Le registre extérieur représente quatre abeilles entremêlées de quatre champignons 芝 Tche. L'abeille est là parce qu'elle connait les rites entre le prince et les sujets ; pour ce qui est du Tche, sa longue durée évoque l'idée de longévité. Le registre intérieur représente quatre canards mandarins. Deux des canards sont posés sur des fleurs, les deux autres tiennent dans leur bec des rubans, tous ont l'air de se jouer en volant, avec les plumes agitées de leurs têtes et de leurs pattes. Le mâle et la femelle du canard mandarin ne se quittent jamais, c'est pourquoi ils servent à exprimer le souhait que mari et femme vieillissent côte à côte. Ce miroir-ci a été fait pour l'usage du palais, son exécution est merveilleuse et il a sûrement servi aux dames du gynécée impérial. Le bronze est couleur de vernis noir, à

PLATE XXXVIII

Mirror with ducks, of the Han dynasty.

Under the Han, bronze mirrors were round or square. This one is round and its diameter is o m. 193 ; it is in the form or a water-chestnut flover (*ling-hua*) with eight segments. The outer section represents four bees alternating with four *chih-* mushrooms 芝. The bee is there because it knows the rites between the prince and his subjects. As for the *chih*, its lastingness evokes the idea of longevity. The inner register represent four mandarin ducks. Two of the ducks are standing on flowers, the two others hold ribbons in their bills ; all have the air of playing while they fly with the ruffled plumage of their heads and feet. The male and female mandarin ducks never leave one another ; that is why they serve to express the idea that husband and wife may grow old side by side. This mirror was made for palace use. Its execution is remarkable and it doubtless served for the ladies of the imperial gynaeceum. The bronze is of the colour of black varnish, having a mercury

patine de mercure, sans la moindre rouille ; cela est dû à l'argent qui fut mêlé à la fonte. De par sa qualité et son état de conservation, c'est un miroir unique parmi ceux des Han.

Miroir au dragon, de la dynastie T'ang.

Diamètre o m. 19.

Ce miroir à huit segments, décoré d'un dragon d'allure puissante, ne rentre pas dans les types les plus usuels des miroirs des Tang. La patine est d'un admirable " vernis noir". La pièce a été cassée en trois morceaux.

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patina, without a trace of rust ; that is due to the silver wich was mixed with the liquid metal. By reason of its quality and state of preservation, this mirror is unique among those of the Han.

Mirror with dragon, of the T'ang dynasty.

Diameter o m. 19.

This mirror, eight lobed, decorated with a relief large dragon, of a very strong attitude, does not class among the usual type of the mirrors of the T'ang dynasty.

The patina has the most admirable black colour highly polished. The mirror has been broken in three pieces.

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PLANCHES XXXIX-XL

Kouan-Yin de bronze, des T'ang.

Cette statue est haute de o m. 575. Le Bodhisattva, d'une expression digne et calme, tient dans la main gauche un flacon d'ambroisie ayant à mi-hauteur un fin bec pour verser le liquide; c'est là un type de flacon connu dans la céramique des T'ang. Les ornements sont particulièrement riches, les draperies s'enroulent et tombent avec grande élégance. La statue s'apparente étroitement comme style à la Kouan-Yin dorée, de dimensions presque identiques, qui fait partie des collections du University Museum de Philadelphie.

Le corps est à patine verte; les draperies et joyaux ont été recouverts de feuilles d'or, sous lesquelles la patine verte apparait également.

PLATES XXXIX-XL

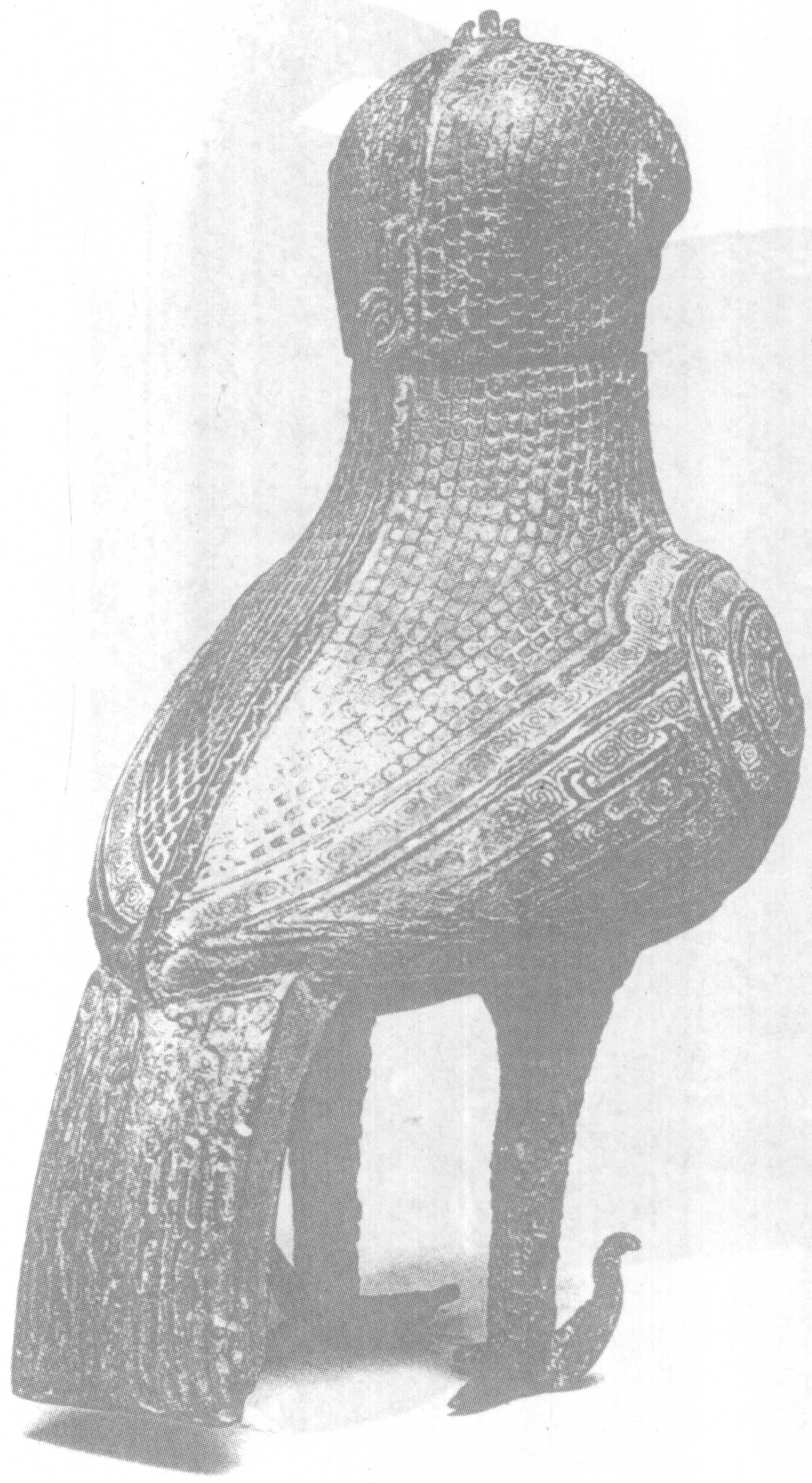
Kwan-Yin in bronze, of the T'ang dynasty.

This statue, height o m. 575, represents the Bodhisattva with a noble and calm expression, holding in the left hand a bottle of ambrosia, with a small spout in the middle for pouring the liquid. This is a type of bottle that has been met in the pottery of the T'ang dynasty. The ornaments are particularly rich, the draperies are rolled round and arranged with extreme elegance. This statue is very similar in style to the one in gilt bronze, of nearly the same dimensions, which is kept in the collections of the University Museum of Philadelphia.

The body has a green patina, and the draperies and jewelleries are covered with gold leaves under which the green patina also appears.

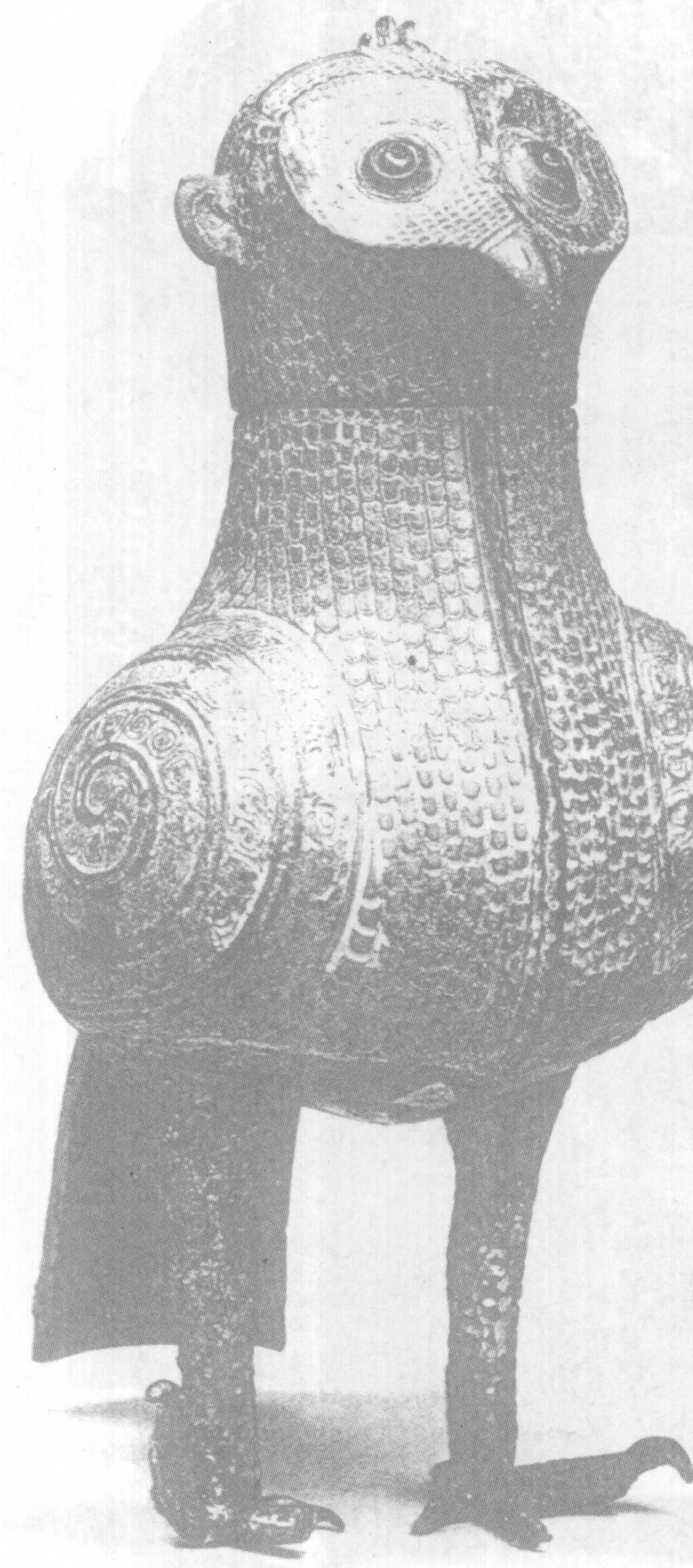
ACHEVÉ D'IMPRIMER LE TRENTE OCTOBRE MIL NEUF CENT VINGT-QUATRE PAR L'IMPRIMERIE PROTAT FRÈRES A MACON POUR M. G. VAN OEST, ÉDITEUR A PARIS. PLANCHES EN HÉLIOTYPIE DE M. L. MAROTTE A PARIS.

PL. II



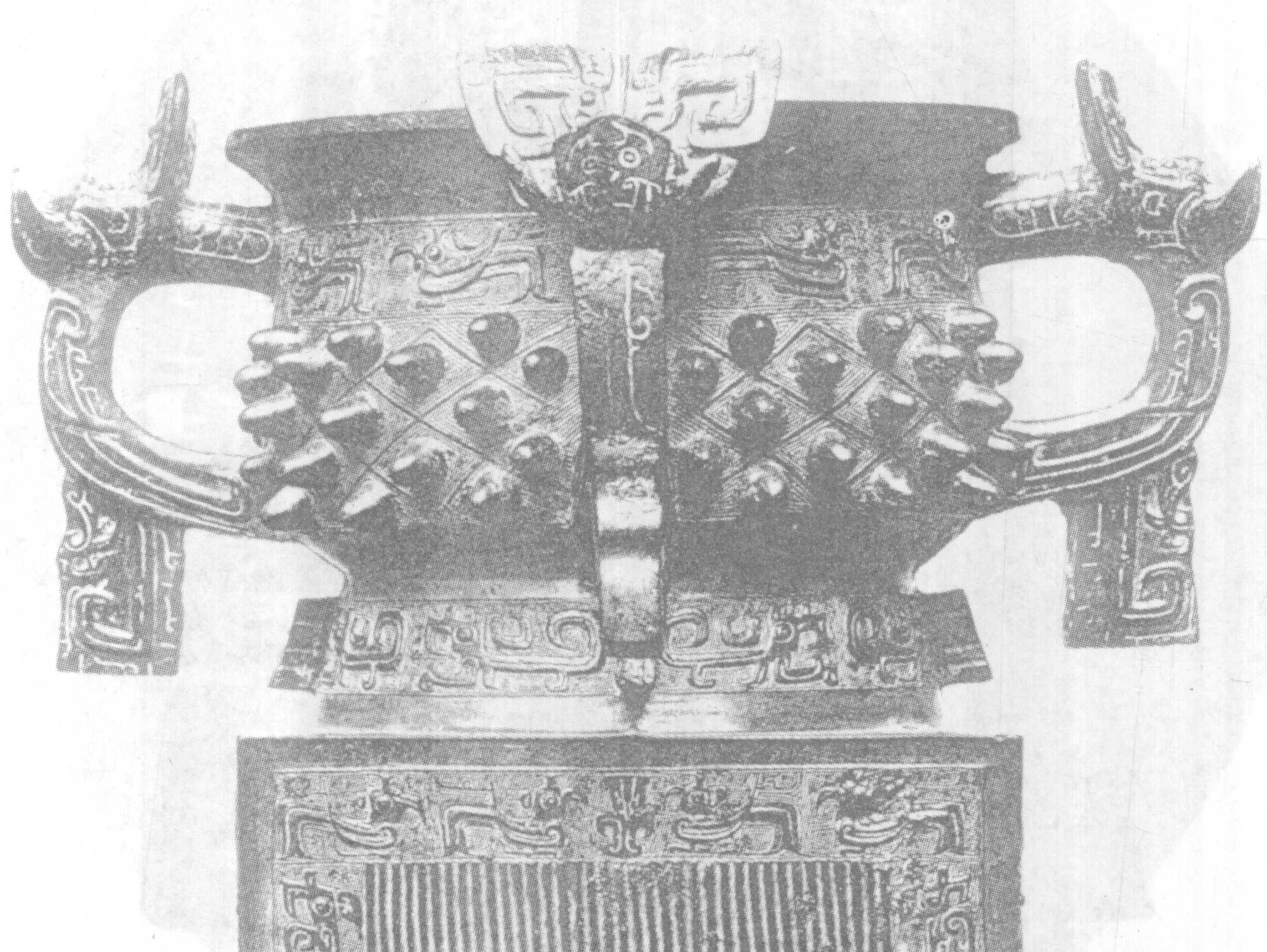
Hélio Léon Marotte Paris

PL. I



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PL. IV



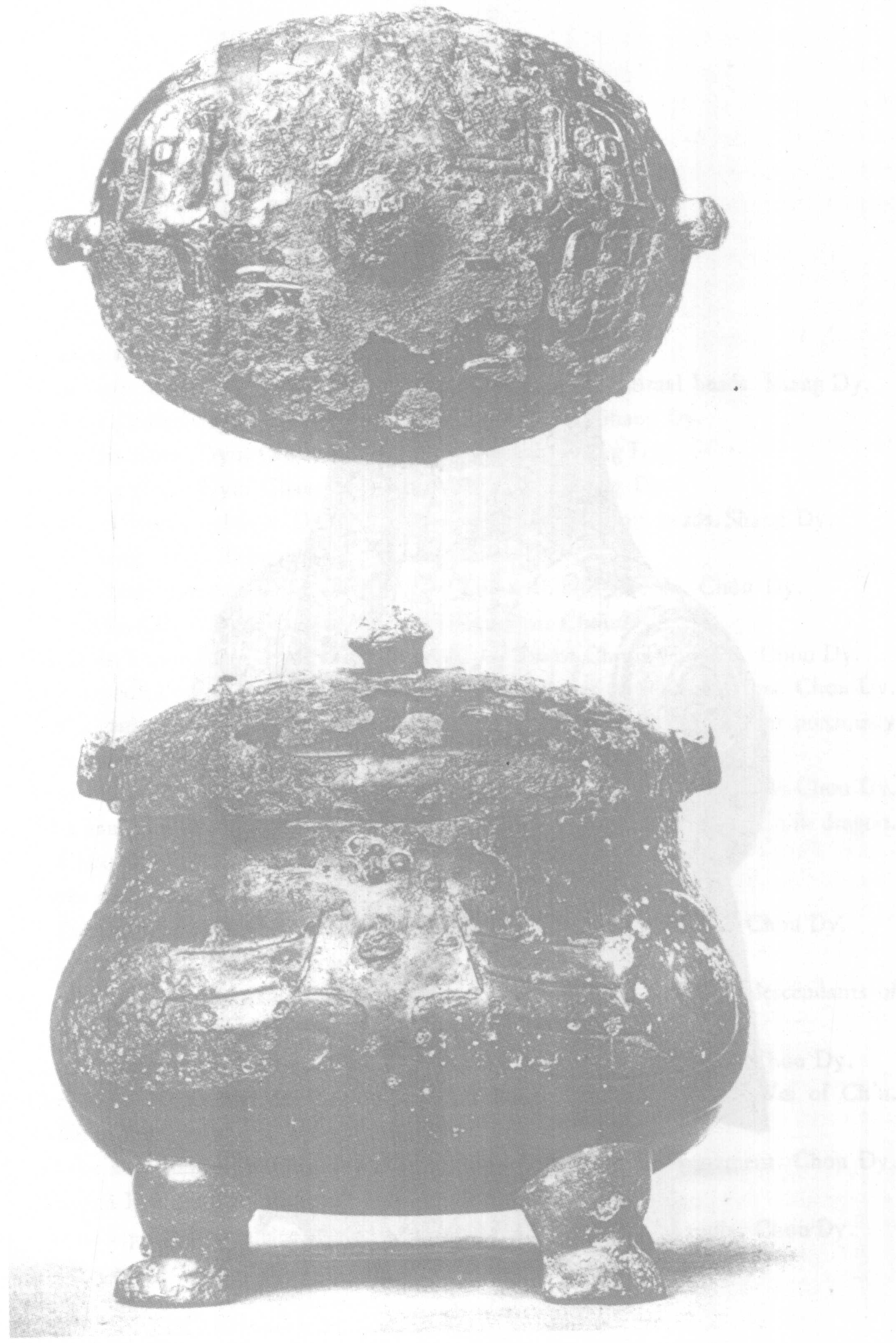
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PL. III

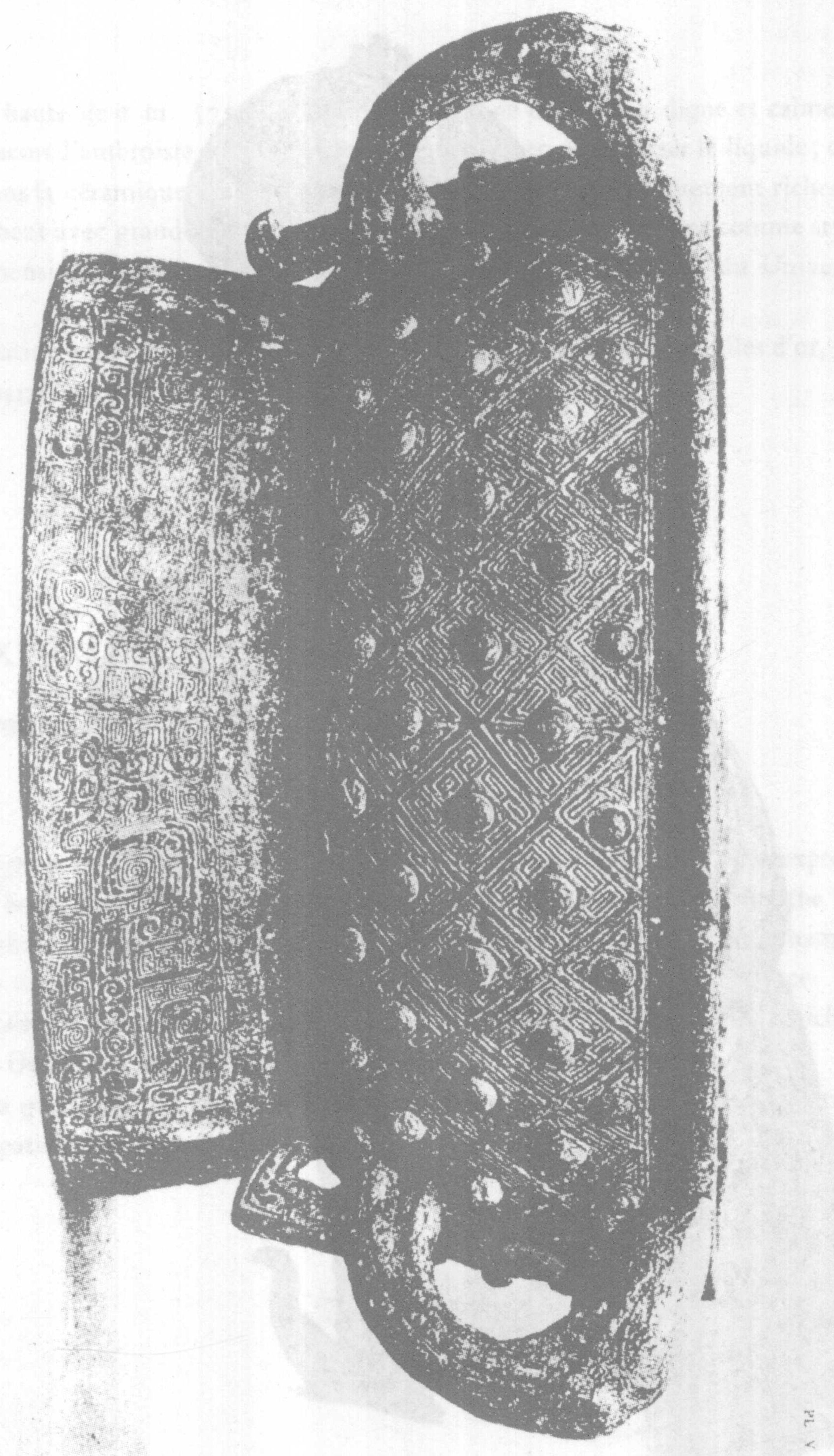


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PL. VI



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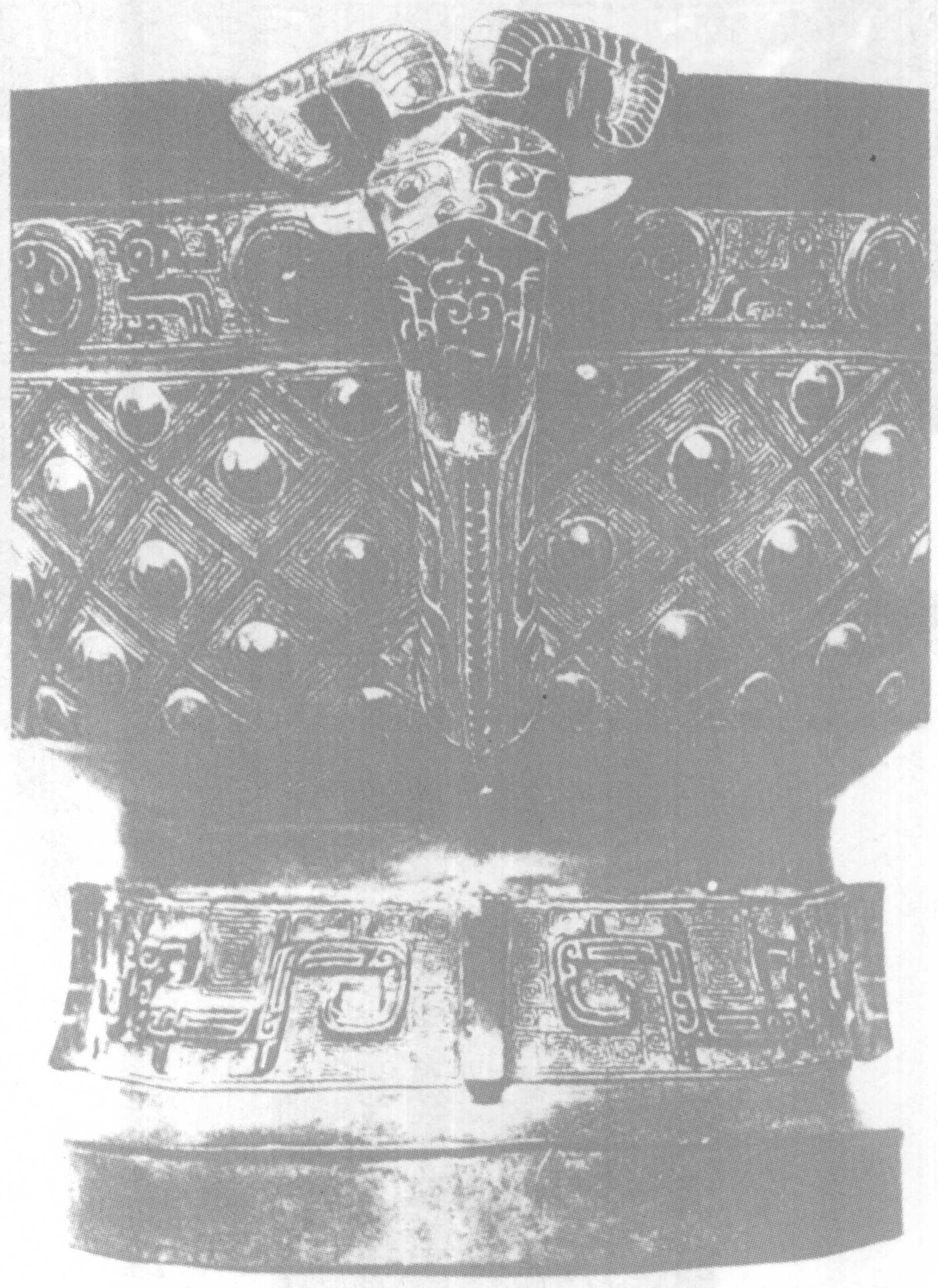
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PL. VIII

PL. VII



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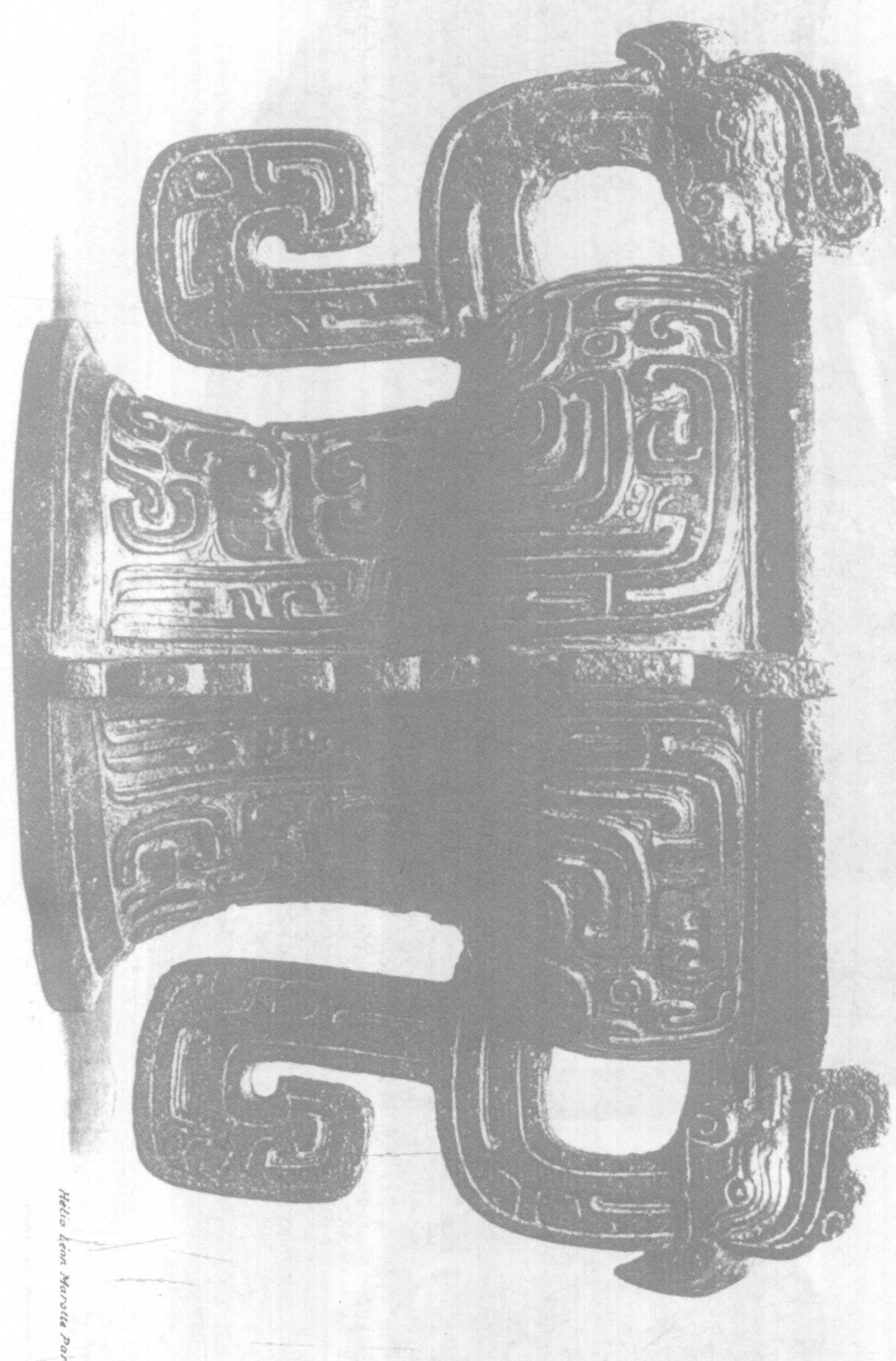
PL. IX



PL. XI



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PL. X

PL. XIII



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PL. XII



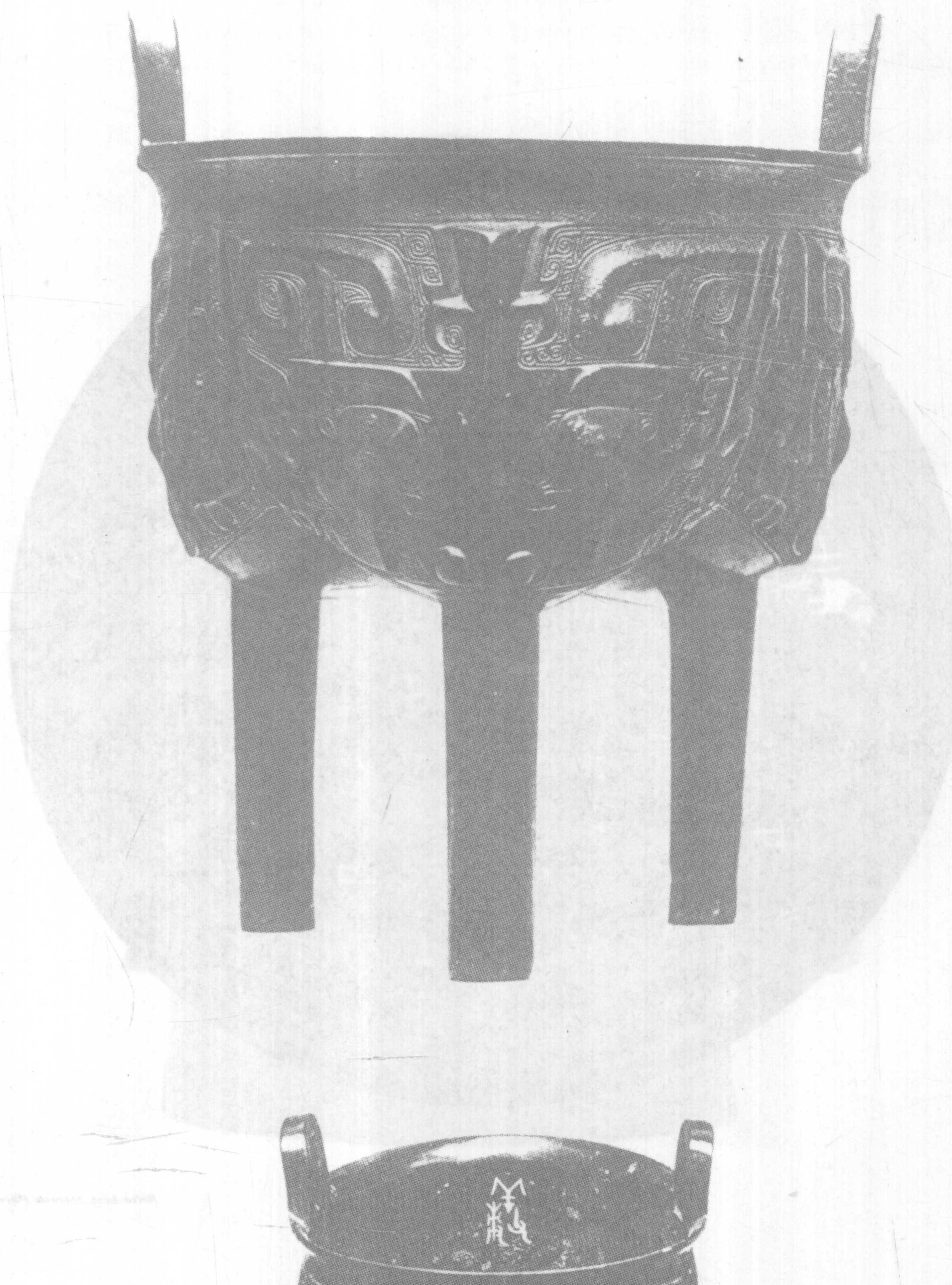
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PL. XV

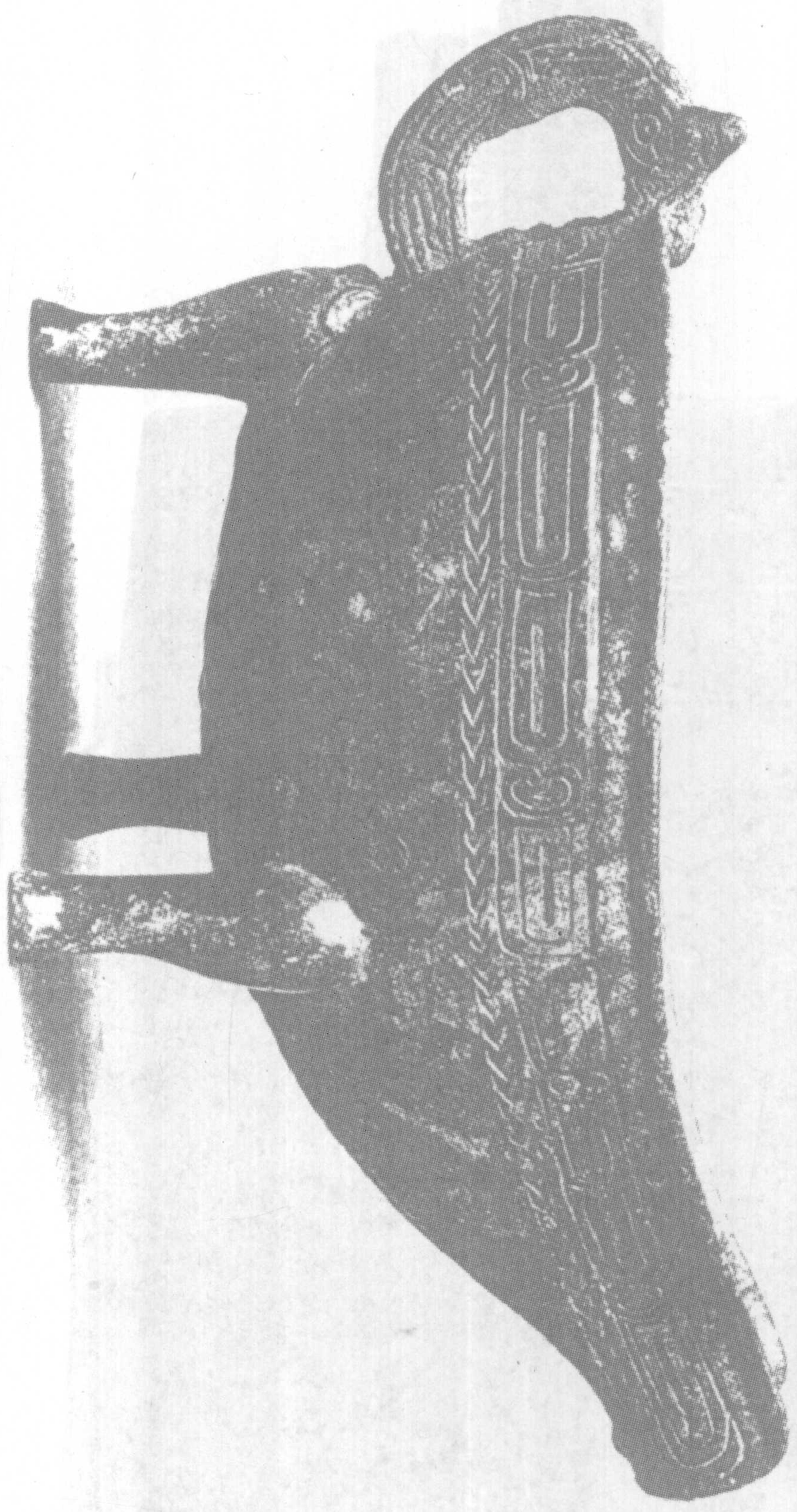


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PL. XIV



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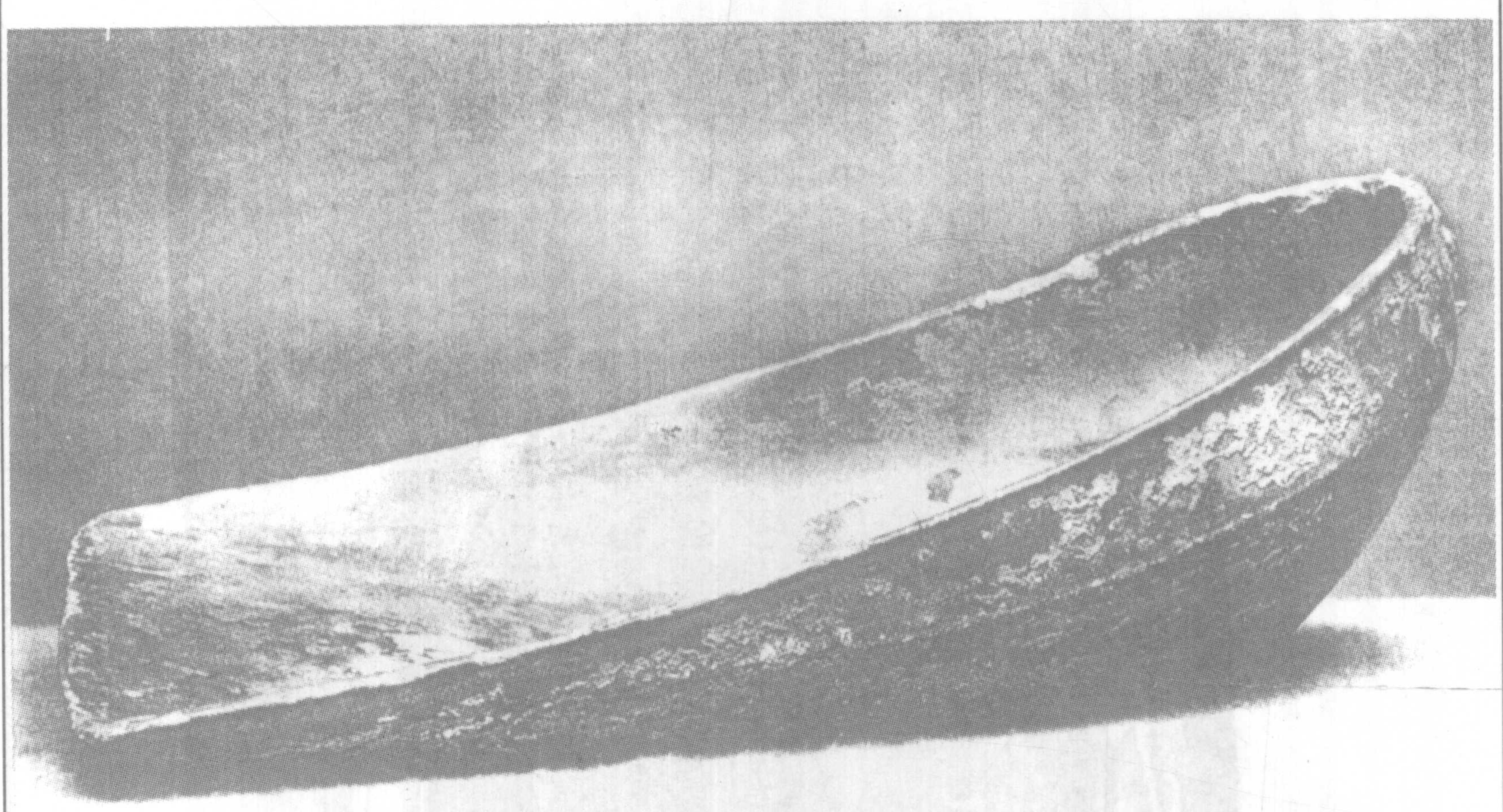
PL. XVII

PL. XVI



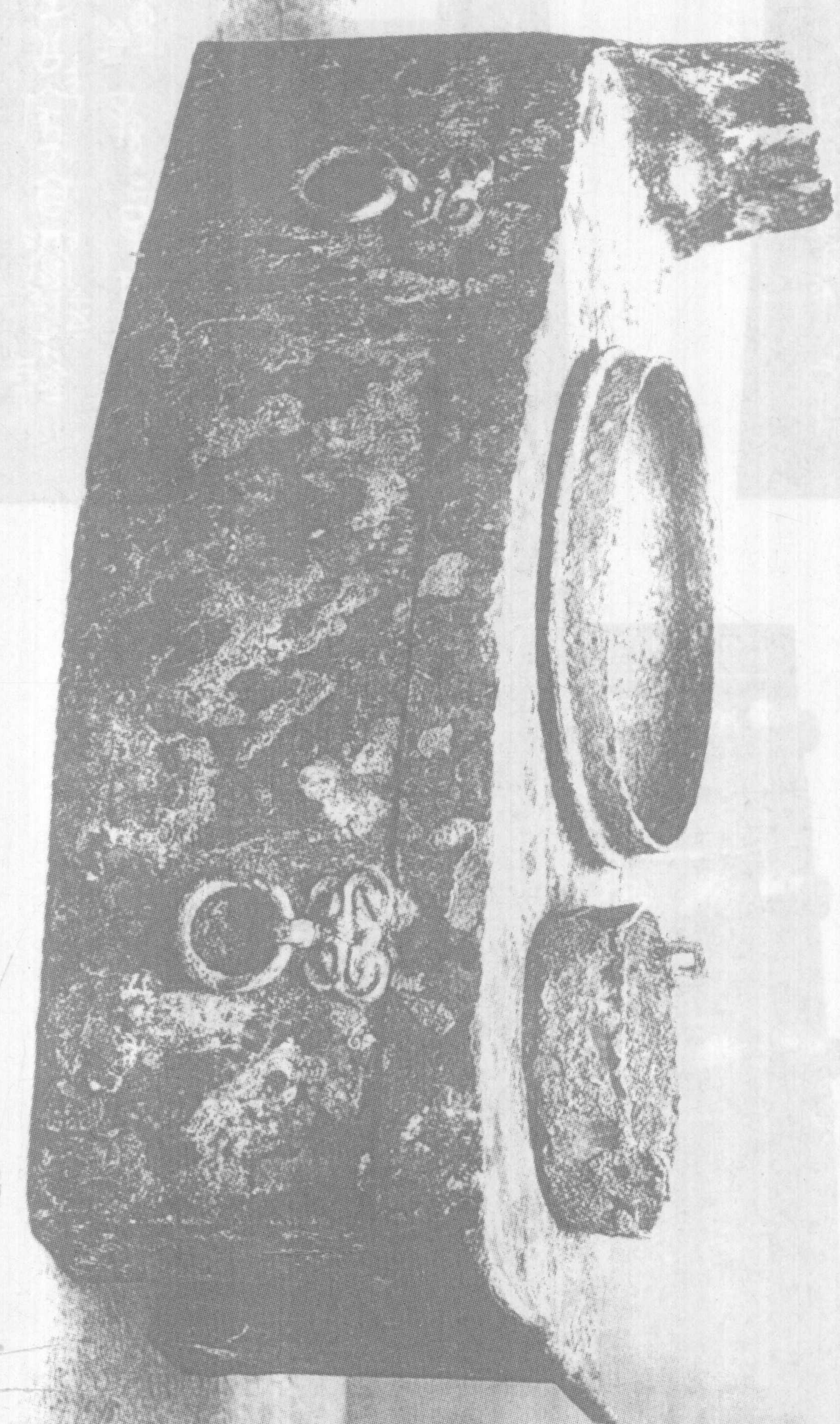
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PL. XIX





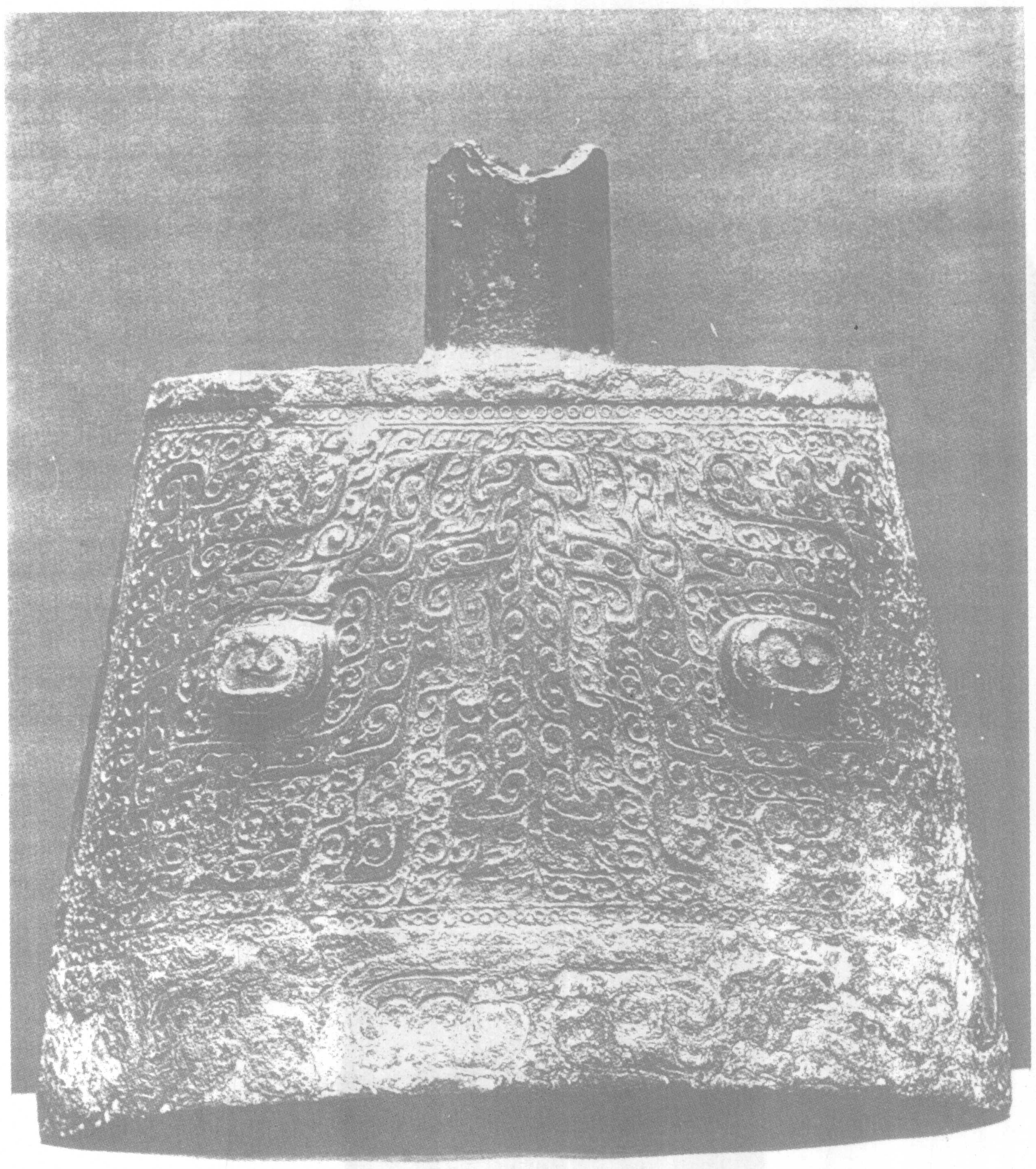
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PL. XVIII

PL. XXI



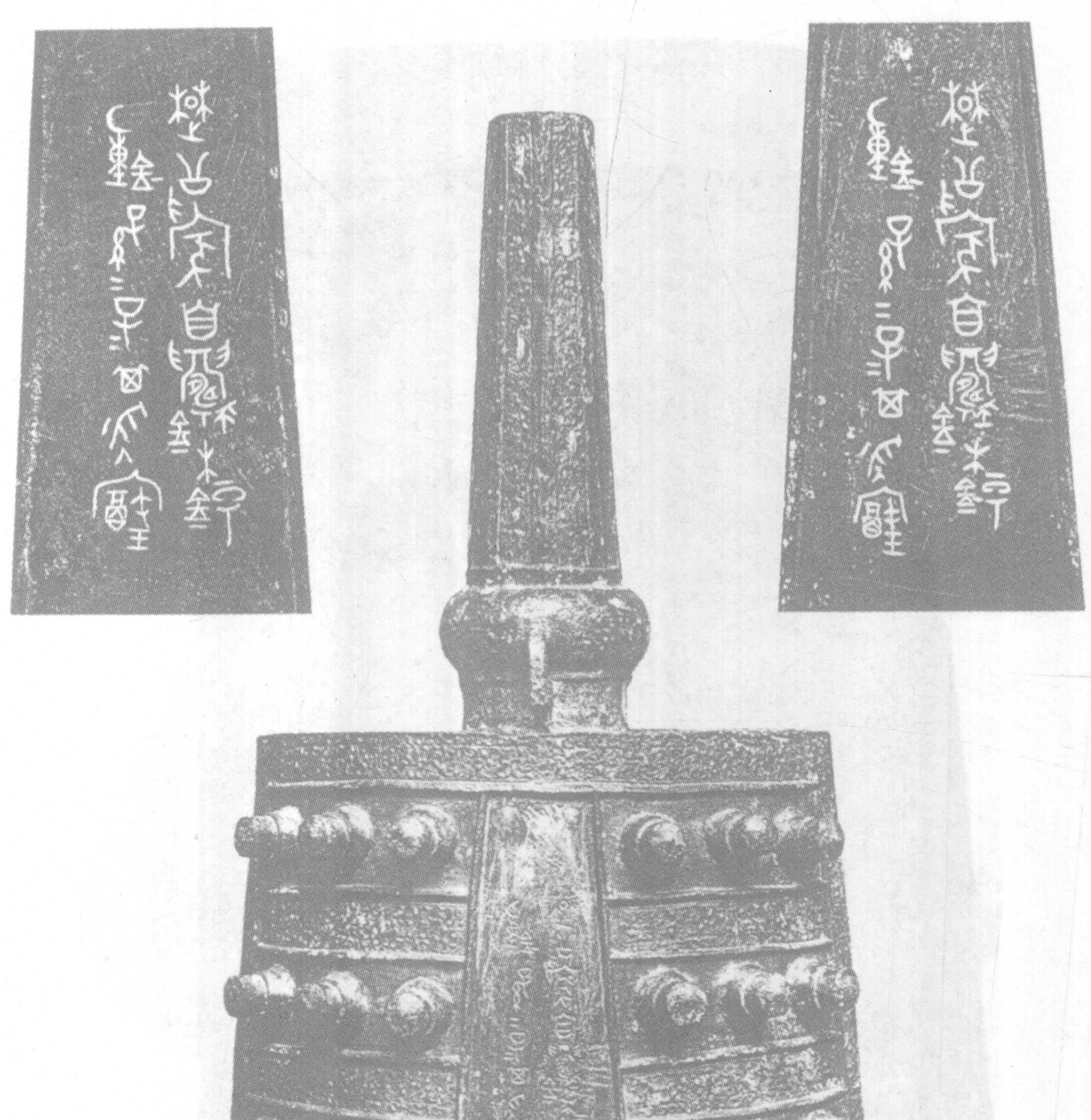
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PL. XX

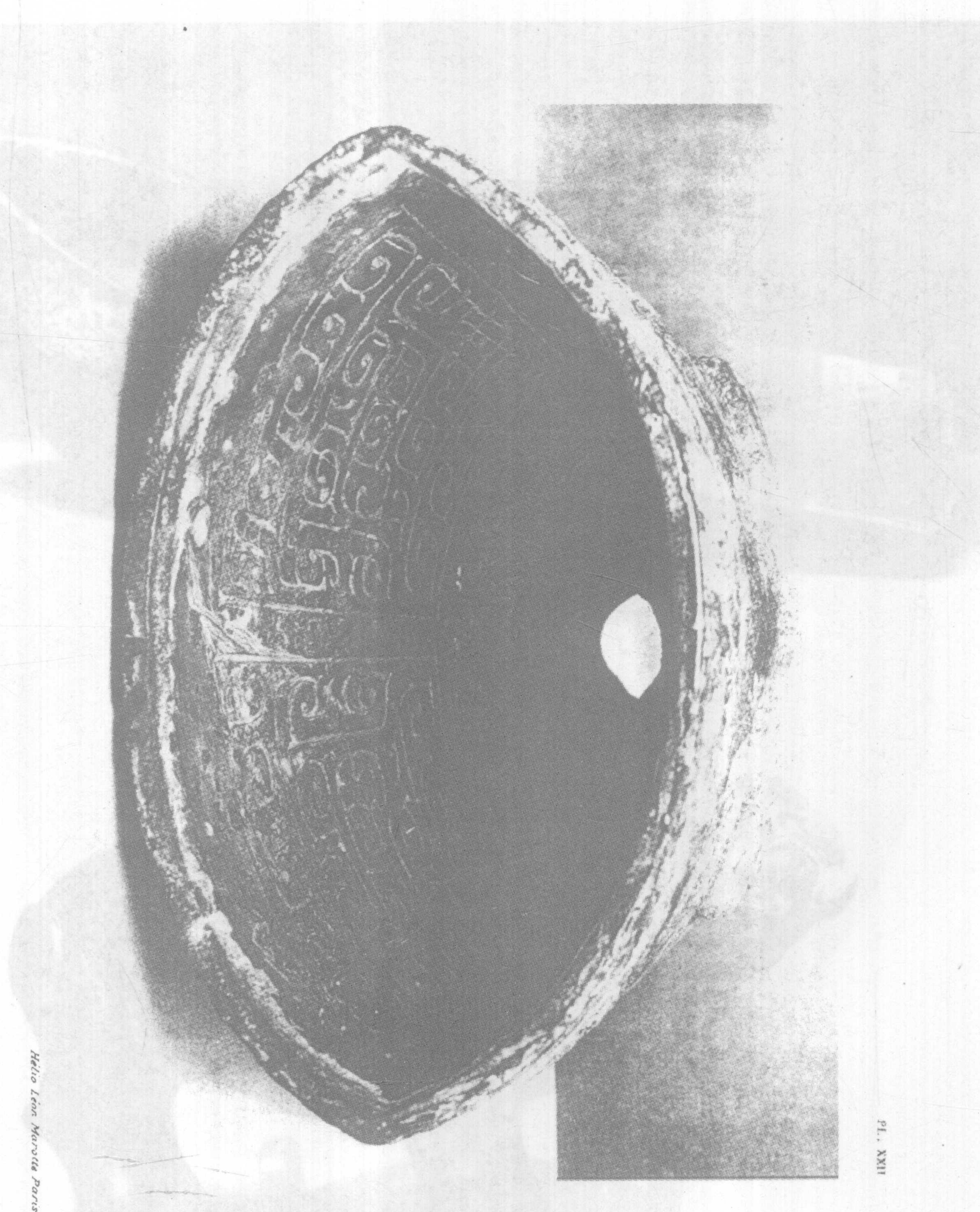


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PL. XXIII



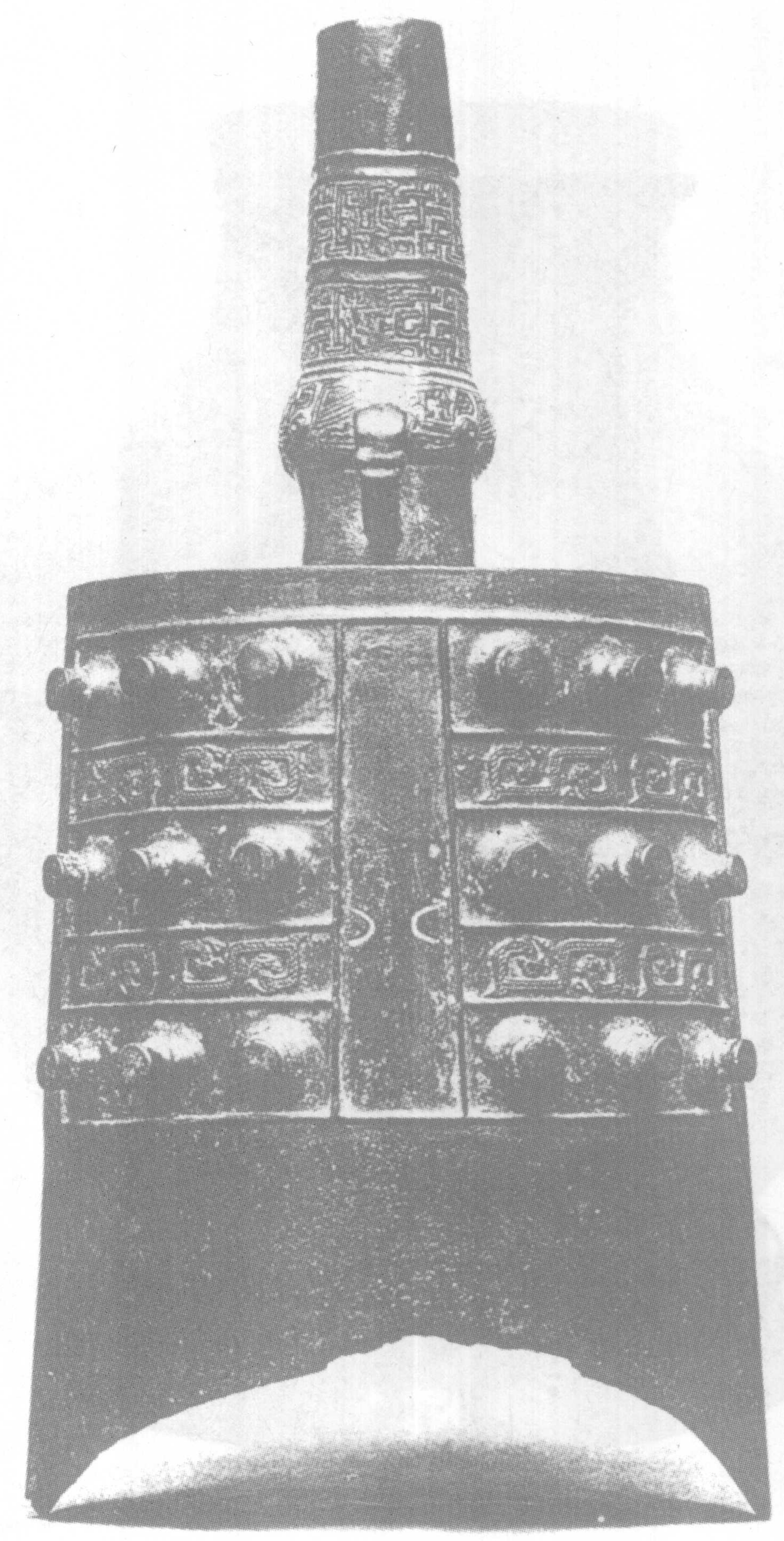
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PL. XXII

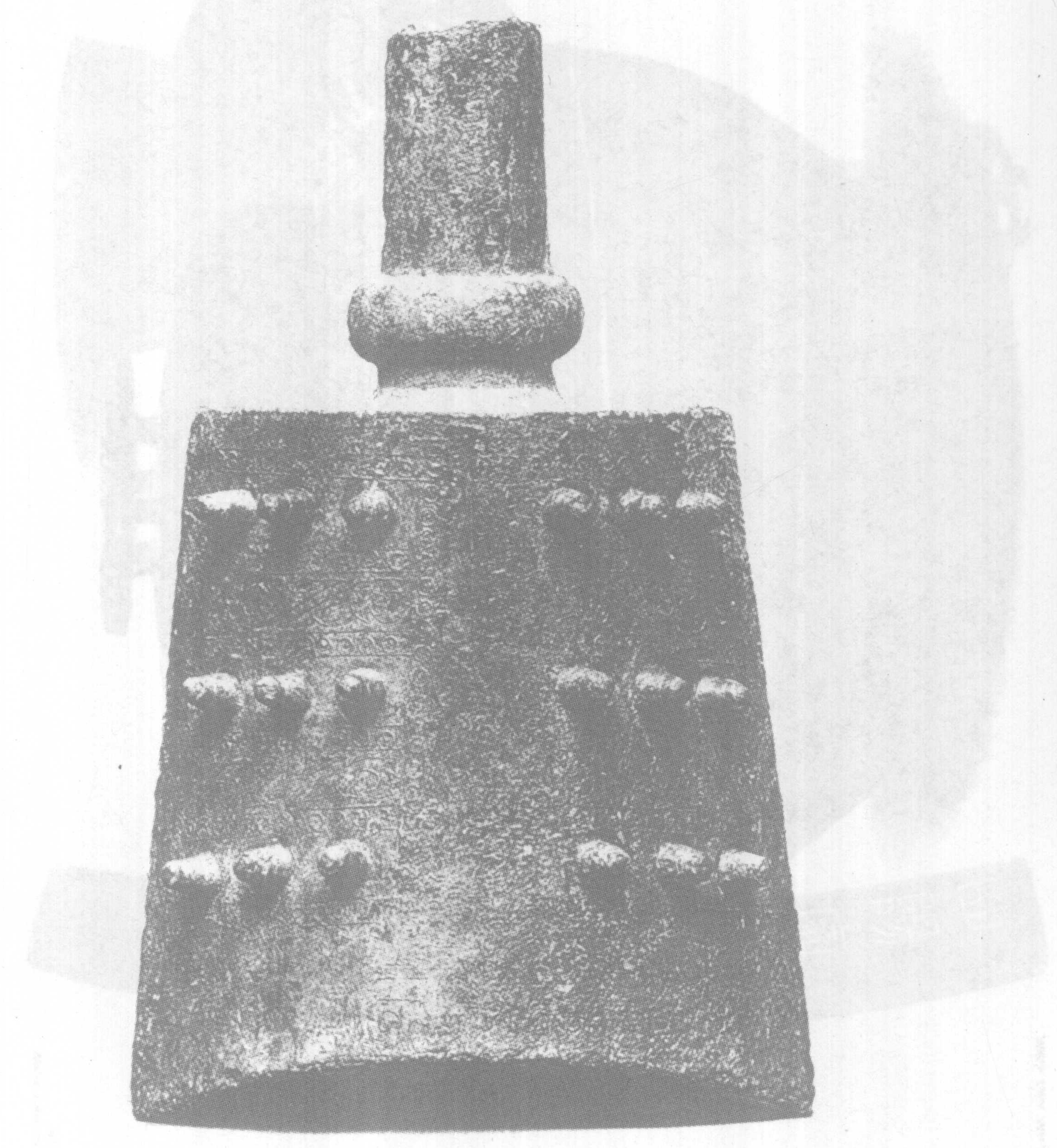
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PL. XXV

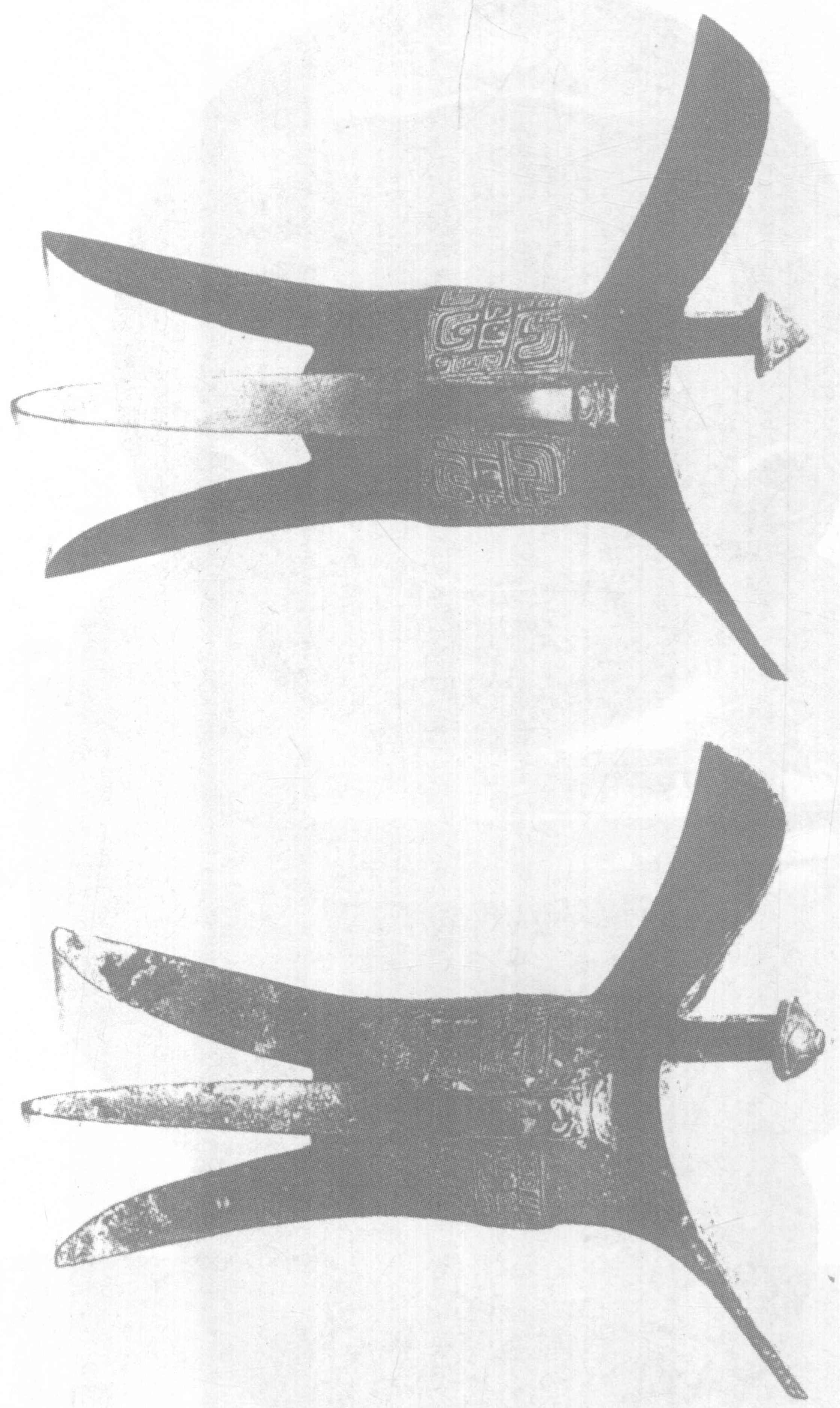


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PL. XXIV



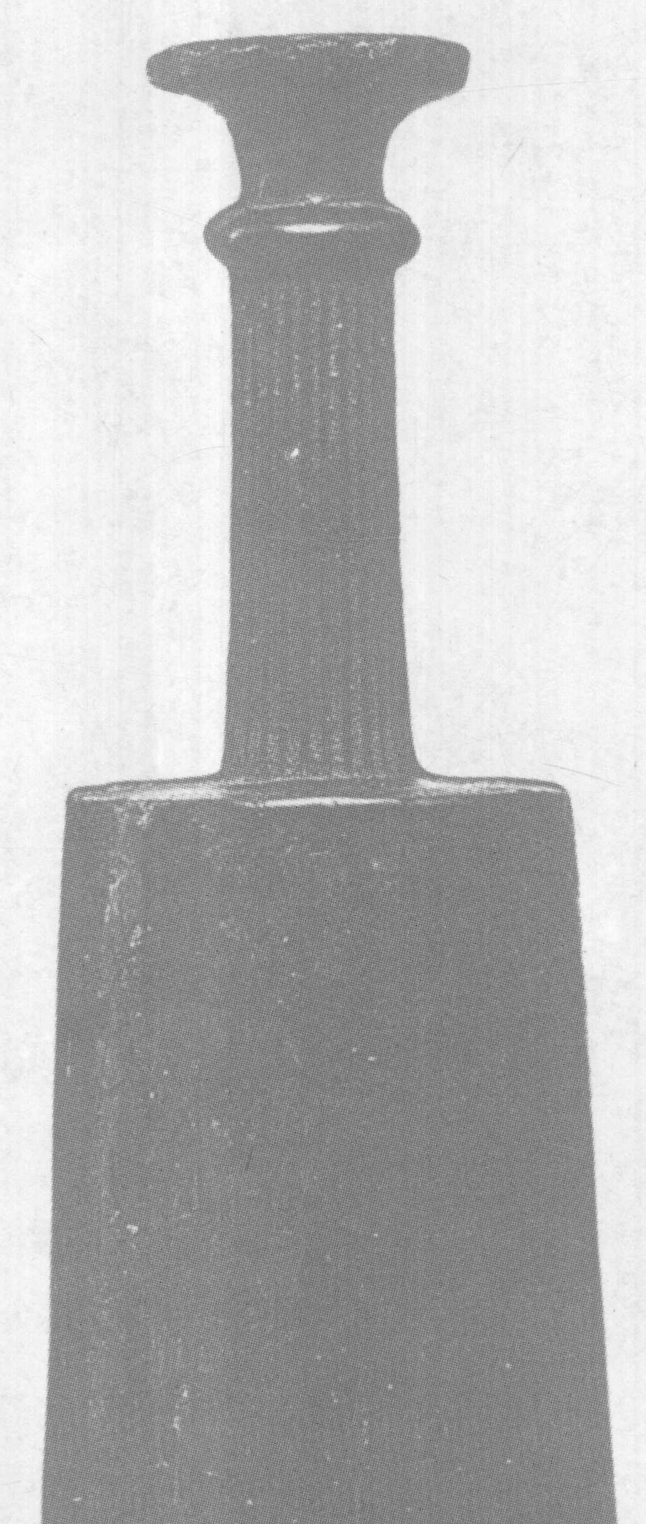
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PL. XXVII

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PL. XXVI



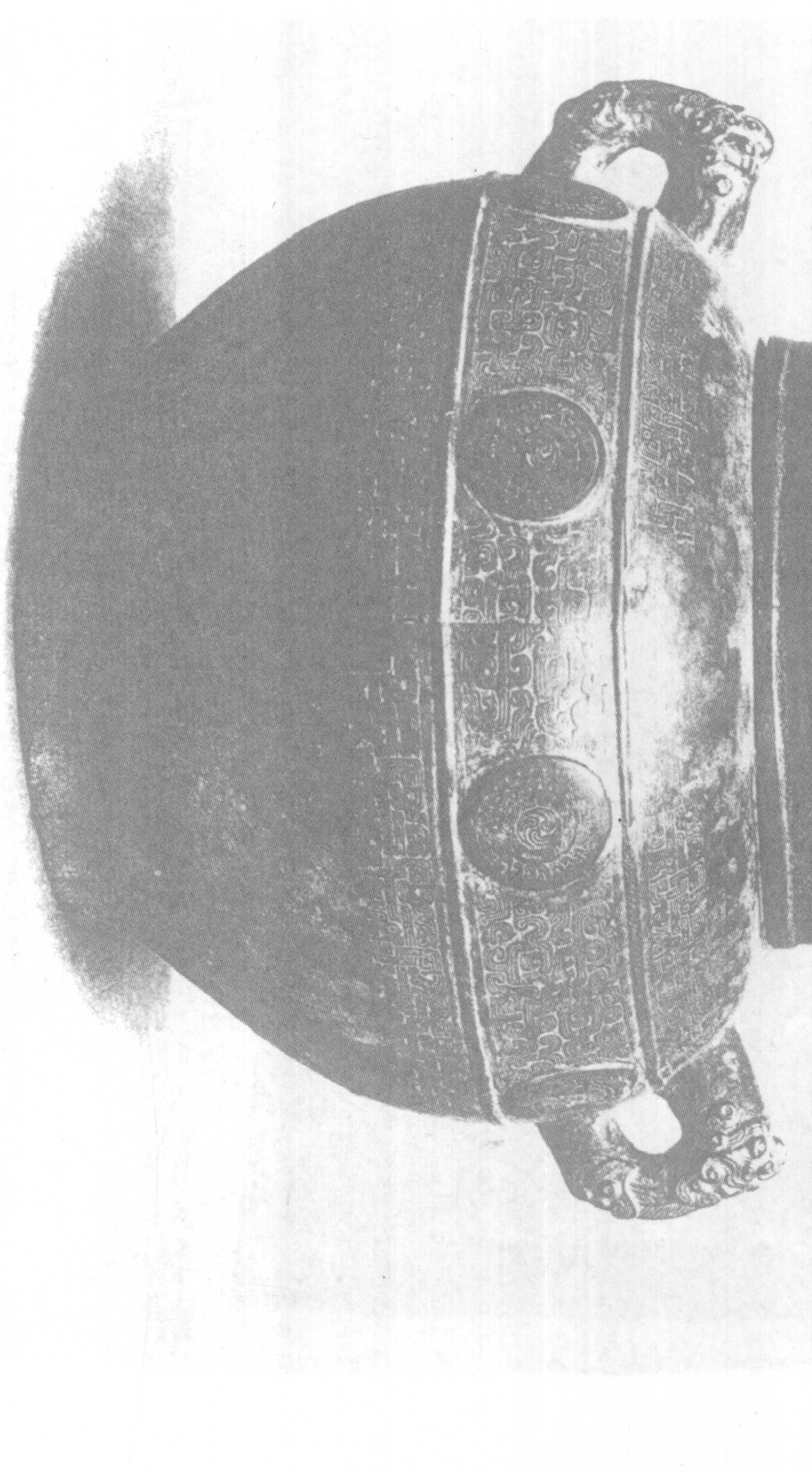
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PL. XXVIII



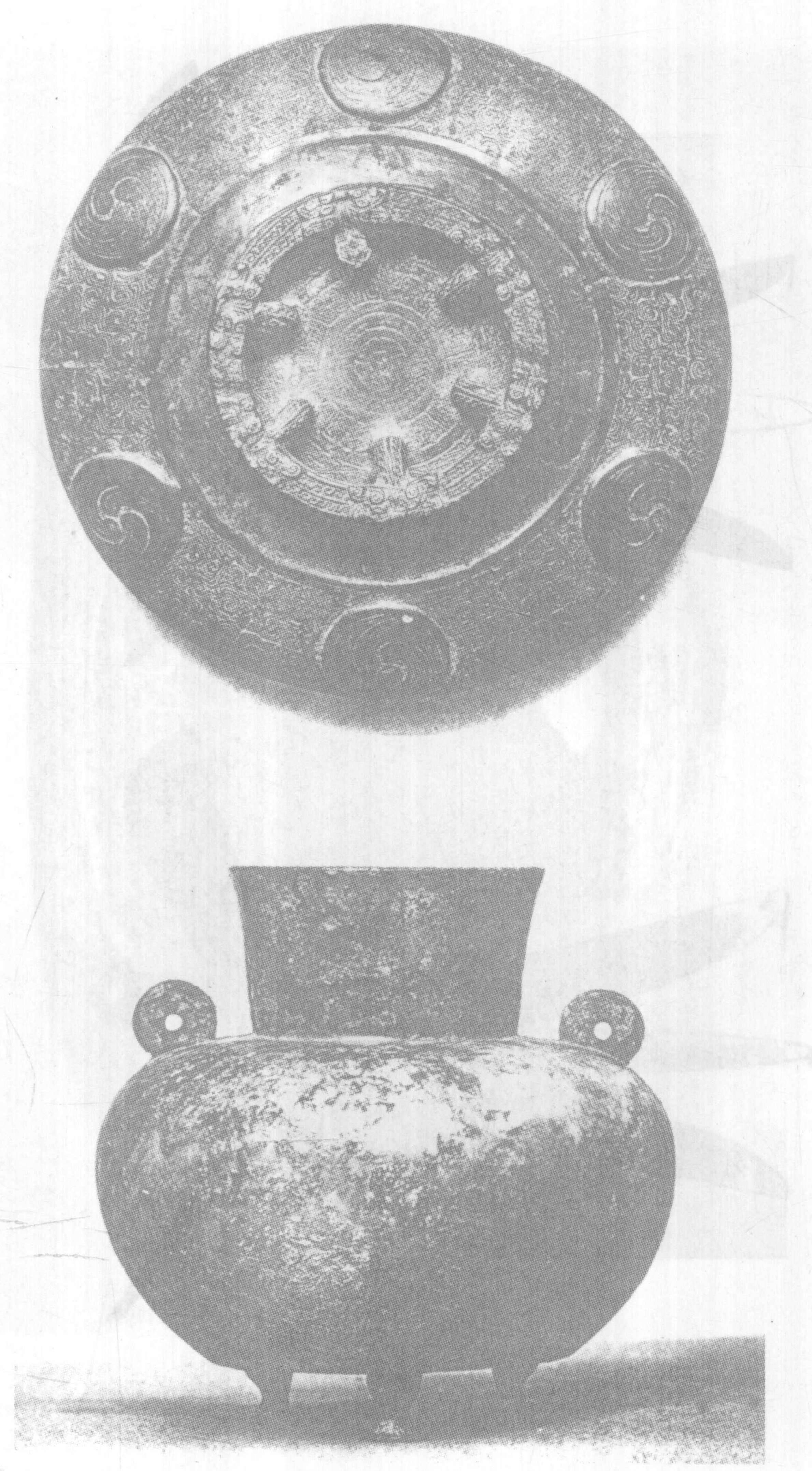
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PL. XXIX



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PL. XXX



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PL. XXXI



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PL. XXXIII



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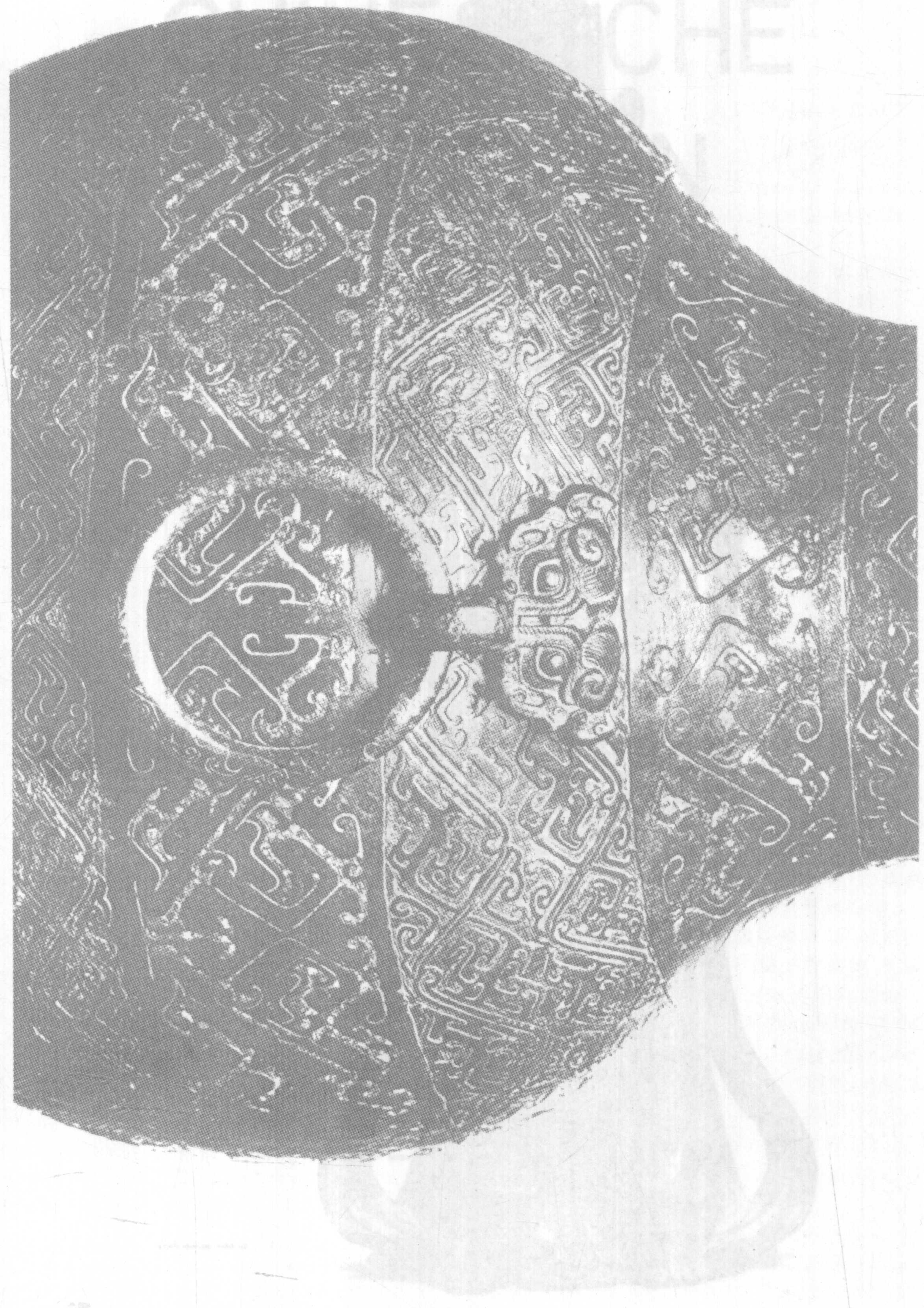
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PL. XXXII

PL. XXXV



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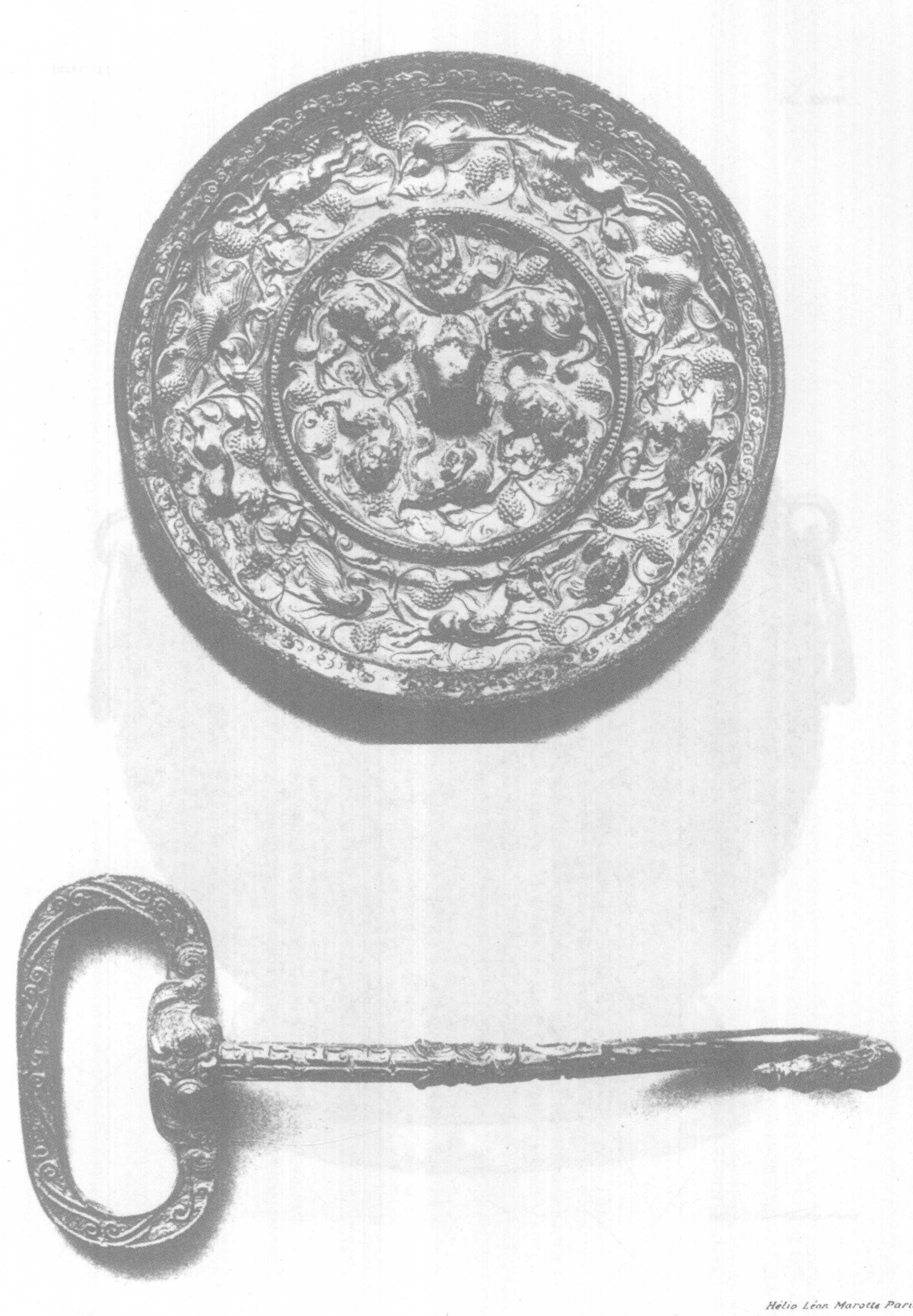
PL. XXXIV



PL. XXXVII

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PL. XXXVI



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PL. XXXIX



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PL. XXXVIII

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PL. XXXX



CHINESISCHE BRONZEN

aus der

Abteilung für Ostasiatische Kunst an den Staatlichen Museen Berlin

Dritte Jahresgabe
der Gesellschaft für Ostasiatische Kunst
Berlin 1928

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CHINESISCHE BRONZEN

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BERLIN 1928

ERNST GROSSE

zum Gedächtnis

Von den 26 in diesem Werke beschriebenen und abgebildeten chinesischen Bronzen – einer Auswahl aus dem Bestande der Abteilung – verdanken die Berliner Museen neunzehn ERNST GROSSE, dem ersten Europäer, der erkannte, daß diese ältesten auch die großartigsten chinesischen Geräte sind. Ihre Veröffentlichung dem Andenken des seltenen Mannes zu widmen war daher einfache Pflicht. Die Bronzen Nr. 1, 2, 3, 5 (Tafel 5—7), 6 (Tafel 8), 7 (Tafel 9), 10 (Tafel 12), 11 (Tafel 13), 12 (Tafel 14), 22 (Tafel 26) erwarb er 1900—1902 durch Hayashi Tadamasa 林忠正*) aus dem Nachlasse des Herrn Machida Hisanari 町田久成**), die Pauke Nr. 23 (Tafel 27) 14 1904 durch Vermittlung einer Berliner Firma in China selbst, die Bronzen Nr. 8 (Tafel 10), 13 (Tafel 15), (Tafel 16), 15 (Tafel 17), 16 (Tafel 18), 20 (Tafel 24), 21 (Tafel 25) im Jahre 1912 für die Berliner Museen in Peking, die Bronze Nr. 18 (Tafel 20, 21) mit mir zusammen 1907 in Tôkyô. Die Bronze Nr. 4, die mit 3 zusammen ein Paar bildet und ebenfalls über Hayashi der Sammlung Machida entstammt, wurde von Woldemar v. Seidlitz 1911 den Berliner Museen überlassen, nachdem sein Plan eines asiatischen Museums gescheitert war. Die Bronzen Nr. 9 (Tafel 11), 19 (Tafel 22, 23) und 24 (Tafel 28) sind im europäischen Kunsthandel, die Bronzen Nr. 17 (Tafel 19), 25 (Tafel 29—31) und 26 (Tafel 32) 1927 in Peking erworben worden. Mit Ausnahme von fünf sind alle Bronzen Geschenke, nicht weniger als elf Geschenke Ernst Großes und seiner Pflegemutter, der Frau Marie Meyer in Freiburg i. Br.

Die Beschreibung der Bronzen beschränkt sich füglich auf das, was man auf den Tafeln nicht sieht, und verzichtet bewußt auf das jedes Wortaufgebot. Die Ornamente wurden erklärt, soweit sie nicht ohne weiteres verständlich sind, aber nicht gedeutet, den Gefäßtypen nur dann der chinesische Name gegeben, wenn er gesichert erschien, denn die üblichen Deutungen der Ornamente und Bezeichnungen der Gefäßtypen beruhen nur auf den Vermutungen chinesischer Antiquare, haben also keinen geschichtlichen Wert. Ausbesserungen sind nur dann angemerkt, wenn sie auf dem Bilde erscheinen.

Die schwierigen Probleme, welche die altchinesische Bronzekunst stellt, konnten in dem kurzen Texte nicht berührt werden. Das Werk wendet sich ja in erster Linie an den Kunstfreund, dem nicht Bedeutung und Zeit, sondern Form und Farbe der Bronzen die Hauptsache ist. Dem Forscher sollen nur die Abbildungen nützliches Material bieten. Mit seiner Ausdeutung und Verwertung hat es noch gute Wege, denn mit der wissenschaftlichen Bearbeitung der altchinesischen Bronzen ist nicht einmal der bescheidenste Anfang gemacht worden – was auch durch die umfangreiche und in ihrer Art bewundernswerte chinesische Bronzeliteratur nicht widerlegt wird. Nur einige ganz allgemeine Bemerkungen meist negativer Art muß ich vorausschicken.

Wir kennen die Bronzekunst der Han-Dynastie (205 vor bis 220 nach Chr.) durch zahlreiche datierte oder datierbare Werke; sie steht in starkem Gegensatze zu den Bronzen, die von den Chinesen den drei ältesten Dynastien, namentlich der Zeit der Chou (1122 ??—221 v. Chr.) zugeschrieben werden. Die Bronzekunst der den Han folgenden Jahrhunderte ist uns fast unbekannt,

*) Geboren in Takaoka, Etchû, eigentlich Nagasaki, adoptiert von Hayashi Tachû, einem mit der europäischen Wissenschaft vertrauten Lehnsmanne der Fürsten Maëda in Toyama, kam als Dolmetscher 1878 zur Weltausstellung nach Paris, wo er 1884 eine Kunsthandlung gründete. 1900 japanischer Generalkommissar zur Pariser Weltausstellung, gestorben 10. 4. 1906 in Tôkyô.

**) Einer der bekanntesten Kunstkenner des modernen Japan, geboren 1838 in Kagoshima, später in Edo (Tôkyô), hervorragender Sinologe, Anfang der 70er Jahre Geheimer Rat, dann Generaldirektor der Kaiserlichen Museen und Mitglied des „Rates der Alten" (Genrô). Im Alter zog er sich als Priester in den Tempel Miidera zurück. Bekannt unter seinem Gô Sekkoku Dôjin 石谷道人 Gestorben 13. 9. 1897. Einige seiner Bronzen auch in der Sammlung Sumitomo, Ōsaka.

aber wir wissen genug von den andern Künsten dieser Zeit, um sagen zu können, daß die angebliche Chou-Kunst in ihr unmöglich ist. Der dogmatischen Behauptung, daß die frühen Formen namentlich für das Sakral- und Zeremonialgerät immer festgehalten worden seien, fehlt jeder Beweis. Die Fundtatsachen sprechen entschieden dagegen; nicht eine einzige Bronze des Chou-Types kann auch nur mit einiger Wahrscheinlichkeit der Zeit der Han- bis T'ang (rd. 200 v. Chr. bis 900 nach Chr.) zugeschrieben werden. Erst unter den Sung (10—13. Jahrhundert) führt das archäologische Interesse für diese „echt chinesische", seit 1200 Jahren tote Kunst, die den Sungantiquaren ebenso fremd war wie uns, zur Wiederbelebung des alten Stils, und erst der Sungzeit werden die ältesten der zahlreichen Chou-Bronzen angehören, die keine Chou-Bronzen sind.

Die Bronzen des Chou-Stiles, soweit es sich nicht um junge – sehr junge – Nachahmungen handelt, liegen also vor den Han, wahrscheinlich auch vor den Ch'in, ihren Vorgängern (221—206 v. Chr.), die ja die Tradition der Chou mit Feuer und Schwert austilgten, – und daß die Chou eine Bronzekunst besaßen, bezeugen sichere literarische Nachrichten. Damit ist aber unsere Weisheit zu Ende. Wir kennen nicht eine einzige sicher datierte oder datierbare Bronze der Chou-Zeit. Nicht wenige tragen allerdings schöne und geschichtlich wichtige Inschriften, die eine Datierung auf Jahr und Tag und häufig auch eine Lokalisierung ermöglichen. Aber leider gilt der Satz: je schöner die Inschrift, je bedenklicher das Werk, und selbst eine alte Inschrift auf einem echten Stücke beweist keineswegs, daß das Stück so alt ist, wie die Inschrift haben möchte. Der mit echtchinesischen Scharfsinn unternommene Versuch, eine der Bronzen von Hsin-chêng (s. Nr. 17, Tf. 19) zu datieren erscheint mir als eine Brücke aus luftigen Theorien, die kein Europäer zu betreten wagen wird. Zum Unglück ist gerade diese Bronze so bedeutungslos, daß selbst eine sichere Datierung uns nicht weiter brächte. Ebenso sind leider die Funde von Chang-tê-fu in Honan, die auf Knochen und Elfenbeinschnitzereien wie auf Keramiken die eigenartige Ornamentik der Chou-Bronzen in reinster Form zeigen, aber noch dem Ende der Shang-Dynastie (etwa 14.—12. Jahrhundert v. Chr.) angehören sollen, wieder ins Ungewisse zurückgesunken, da ihre Zugehörigkeit zu den Shang-Schichten ganz zweifelhaft ist. Wir müssen also vorläufig auf jede genauere Datierung der Bronzen vor der Ch'in-Periode verzichten. Ebenso müssen wir anerkennen, daß wir von ihrer Ornamentik fast nichts verstehen und von der Art ihrer Verwendung so gut wie nichts wissen.

Die Inschriften und Einzelheiten der Tafeln 33—35 sind nach Abreibungen ausgeführt, die ich Herrn Umehara Suëji 梅原末治 in Kyôto und Herrn Leopold Reidemeister verdanke. Die großen chinesischen Charaktere hat die Reichsdruckerei freundlichst zur Verfügung gestellt.

Otto Kümmel.

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1.

TAFEL 1.

Vase unbekannten Namens und Zweckes.

Höhe 45, Höhe des Unterteils 36,6, größte Breite 23, größte Tiefe 20, unten Breite 12, Tiefe 10, am Halsansatz Breite 13, Tiefe 11 cm, Metallstärke etwa 2 mm, Gewicht 5,98 kg.

Boden gewölbt, Flächen leicht gewölbt. An der Schulter auf allen vier Seiten plastische Medaillons mit Wirbelmotiven, dazwischen vorne und hinten plastischer Wildschafkopf. An den Seiten Griffe, oben in Wildschafköpfe auslaufend. Hinten 5 cm oberhalb des Bodens ein ebenso geformter Griff zum Neigen der Bronze, die also ein Gießgefäß zu sein scheint. An den Schmalseiten des Deckels nur zwei Medaillons. Unter den Henkeln Zeichen  = 矛. Auf dem Deckelknopfe gravierter Wildschafkopf. Patina krustig, zum Teil mit einer rötlichen Sinterschicht bedeckt, matt bis malachitgrün, darunter rötlich. Keine Gußnähte, Griffe anscheinend angelötet.

Gleichartiger Typ nicht bekannt. Ähnlich Ning-shou-ku-chien VIa, 34.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

2.

TAFEL 2.

Vase unbekannten Namens und Zweckes.

Höhe 36, größter Durchmesser unten 19,5, kleinster 16,5, Durchmesser der Mündung 17, kleinster 14 cm, Umfang 68 cm, Metallstärke etwa 7 mm, Gewicht 5,75 kg.

Im Querschnitt oval. Um den Fuß und die engste Stelle des Rumpfes legt sich ein Ornamentband, in der Mitte Kopf eines Tieres, sog. T'ao-t'ieh 饕餮, mit plastischen Augen und Nase, dessen in Spiralen aufgelöster Körper zu beiden Seiten abgerollt ist. Röhrenösen in Gestalt von Tierköpfen. Patina krustig, grau-grün, darunter rot. Reste von Gußnähten zu beiden Schmalseiten.

Ähnliche, aber nicht genau entsprechende Typen u. a. Po-ku-t'u-lu XII, 18—20, Hsi-ch'ing-ku-chien XX. Sie bezeichnen sich bald als Tsun 尊, bald als I 彝.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

3.

TAFEL 3.

Großes Becken unbekannten Namens und Zweckes.

Höhe 30, Durchmesser 46, Tiefe 26, größter Umfang 151 cm, Metallstärke etwa 4 mm, Gewicht 17,22 kg.

Der Zierat besteht aus blattartigen, hängenden Motiven mit Tierköpfen in geometrischer Zeichnung (s. Tafel 33, a). Anscheinend angelötete Griffe in Tierform. Innen gravierte Inschrift ungewöhnlichen Stiles, die noch nicht entziffert ist (s. Tafel 33, b). Die in dem Kataloge der Vente Hayashi (Paris

16–21. 2. 1903), Nr. 997, für die gleichlautende Inschrift des Gegenstückes (s. folgende Nr.) gegebene Lesung: „Son-i (vase) fondu, sur ordre royal, par Kishin, pour l'usage de Kwatan et de ses descendants", welche die chinesischen Namen japanisch umschreibt, ist offenbar reine Phantasie. Rauhe, blau und grün gewölkte Patina. Bronze fast völlig aufgezehrt. Vier deutliche Gußnähte. Vermutlich sehr früh.

Gleichartiger Typ nicht bekannt.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

4.

TAFEL 4.

Großes Becken, Gegenstück zu Nr. 3.

Höhe 28, Durchmesser 46, Tiefe 26, größter Umfang 152 cm, Metallstärke etwa 4 mm, Gewicht 16,72 kg.

Formen und Zierat wie bei Nr. 3. Die gleichlautende Inschrift s. Tafel 33, c. Rauhe, graugrüne, blau und eisenrot gewölkte Patina. Bronze fast völlig aufgezehrt. Vier Gußnähte. Vermutlich sehr früh.

Sammlung Machida – Hayashi – v. Seidlitz. Geschenk eines ungenannten Freundes der Sammlung.

5.

TAFEL 5–7.

Gefäß unbekannten Namens und Zweckes.

Höhe 41,8, ohne die Röhre 31,7, kleinster Umfang 47, größte Breite mit Griff 21 cm, Metallstärke etwa 2 mm, Gewicht 4,02 kg.

Die Form und den Zierat des merkwürdigen Gefäßes zeigen die Abbildungen. Die drei, Ziegeneutern ähnlich gebildeten Füße sind innen hohl. Auf dem Griffe oben ein Stierkopf mit geometrischer Innenzeichnung. Das Ornamentband um die engste Stelle des Rumpfes zeigt drei T'ao-t'ieh-Masken, deren in Spiralen aufgelöste Körper nach beiden Seiten abgerollt sind. Die Formen des Gefäßes haben offenbar einen sexuellen Sinn (Vulva, Membrum und Mammae). Glatte, graugrüne Patina. Keine Reste von Gußnähten. Vermutlich sehr früh.

Ein Gegenstück nur Po-ku-t'u-lu XV, 21, reicher ornamentiert, der Han-Zeit zugeschrieben.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

6.

TAFEL 8.

Gefäß unbekannten Namens und Zweckes.

Höhe 25,7, Mündungsdurchmesser 24, größter Umfang 105, Tiefe innen 20 cm, Metallstärke etwa 4 mm, Gewicht 3,57 kg.

Auf der Schulter drei Paare gegenständiger, geometrisch aufgelöster Tiere zu beiden Seiten plastischer Wildschafköpfe. Ähnliches Ornament ohne die Wildschafköpfe auf dem Fußringe. Auf dem Rumpfe unter den plastischen Köpfen nach beiden Seiten abgerollte T'ao-t'ieh. Auf der Außenseite des Bodens Rautenmuster. Graugrüne Patina, innen türkisblau. Drei Gußnähte laufen in der Mittellinie zwischen den plastischen Köpfen senkrecht herunter, sie werden durch die mangelhafte Fügung der Ornamente und der beiden schmalen Bänder um den Hals betont. An derselben Stelle im Fußring ein jetzt verlötetes Loch. Vermutlich vor Ch'in.

Geläufiger Typ, in China als P'ou 瓿 bezeichnet, Hsi-ch'ing-hsü-hien XVI, 14 bezeichnet sich ein gleichartiges Gefäß aber selbst als I.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

7.

TAFEL 9.

Gefäß unbekannten Namens und Zweckes.

Höhe 19,5, oberer Durchmesser 18, größter Durchmesser 32, Tiefe 14,9 cm, Metallstärke 3–4 mm, Gewicht 4,3 kg.

Verzierung aus der Tafel ersichtlich. Das Kreisband wiederholt sich auch unterhalb des Flechtmusters auf dem Körper. Oben Fries von geometrisch aufgelösten Tieren mit plastischen Augen. Drei Gußnähte, denen Löcher im Fuße entsprechen. Grüne und rotbraune matte Patina. Vor Ch'in.

Ziemlich seltener Typ, vgl. z. B. Po-ku-t'u-lu XX.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

8.

TAFEL 10.

I 彝, angeblich Gefäß für Opferwein.

Höhe 16,2, oberer Durchmesser 22,2, Tiefe 11,5, größte Breite mit den Griffen 31,4 größter Umfang 67 cm, Metallstärke etwa 3 mm, Gewicht 3,075 kg.

Um den Fuß und den oberen Rand zieht sich ein Ornamentband mit geometrisch aufgelösten Tieren. In der Mitte der Bänder oben eine plastische T'ao-t'ieh-Maske, unten ein Grat, der Kamm des T'ao-t'ieh. Die besonders gegossenen, innen offenen Griffe sind oben mit plastischen Hasenköpfen geschmückt. Gußnähte an den Griffen erkennbar. Patina glänzend, glatt, grün mit purpurnen Ausblühungen. Innen das eingravierte Zeichen Tafel 34, a, das Bild eines dreibeinigen Kochtopfes Li, in jüngerer Form 鬲.

1912 von Ernst Große in Peking erworben. Geschenk eines ungenannten Freundes der Sammlung.
Sehr häufiger Typ. Der Name I ist durch Inschriften belegt, gleichartige Gefäße bezeichnen sich aber auch als Tun 敦.

9.

TAFEL 11.

Krone einer Glocke, Chung 鐘.

Höhe 39, Durchmesser unten 13, oben 10,5, Höhe des Wulstes 5,5, Stärke des Wulstes 2,5, Durchmesser des Ringes 7,9, Metallstärke unten 1,5 cm, Gewicht 24,6 kg.

Die Dreiecksornamente des Schaftes sind mit ein- und zweiköpfigen Tieren verziert, die geometrische Muster tragen. Ähnlicher Zierat auf dem Wulste. Der Ring hat die Form des T'ao-t'ieh. Der untere Rand war etwa 1½ cm in das Dach der Glocke eingelassen, entweder verschweißt oder kalt in die noch heiße Glocke eingesetzt, und durch den Druck des erkalteten Metalles festgehalten. Helle Bronze, hellgrüne Patina. Vermutlich vor Ch'in.

Vgl. Reidemeister, Berliner Museen XLVIII, S. 36 f.
Nr. 14, Tafel 16 gibt eine kleinere Glocke mit ähnlicher Krone wieder. Die Höhe des Fragments läßt auf eine Gesamthöhe der Glocke von über einem Meter schließen, wie sie in den chinesischen Bronzewerken nicht belegt ist. Herr Hoyt in New York besitzt aber eine Krone von ganz ähnlicher Form und Verzierung, die einer noch etwas größeren Glocke angehört zu haben scheint.
Erworben 1925 im Berliner Kunsthandel.

10.

TAFEL 12.

Dreifuß, Ting 鼎.

Höhe 28,5, Durchmesser der Öffnung 26,9, größter Durchmesser mit den Henkeln 33,3, größter Umfang 97, Höhe des Unterteils 25,7, Tiefe 17,5, Höhe des Deckels mit den Ringen 6,7 cm, Metallstärke etwa 5 mm, Gewicht 8,02 kg.

Das auf der Tafel nicht erkennbare Ornament des Deckels s. Tafel 34, c, das blattförmige Ornament um die Bodenwölbung mit geometrisch aufgelöstem T'ao-t'ieh s. Tafel 34, b. Das Schnurornament um den Körper wiederholt sich graviert an den Griffen. Patina dunkelgrün mit rötlichen und braungelben Flecken, an den verkrusteten Stellen grün. Deckel innen türkisblau. Vermutlich Ch'in.

Geläufiger Typ. Die Ting, dreifüßige Kochkessel, gehören zum ältesten gesicherten Gerät der Chinesen. Besonders ähnlich Po-ku-t'u-lu V, 30, 35
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

11.

TAFEL 13.

Topf, Hu 壺.

Ganze Höhe 45, Höhe des Unterteils 35, des Deckels 15,5, Höhe des Einsatzteiles des Deckels 5,5, Durchmesser an der breitesten Stelle 23,2 und 19,5, unten 21,5 und 18, oben 14,7 und 13, Tiefe 31 cm, Metallstärke etwa 4 mm, Gewicht 6,39 kg.

Im Grundriß oval. Griffe in Form von Stierköpfen, mit senkrechtem Durchlaß für eine Schnur, für deren Aufnahme an den Schmalseiten von Deckel und Fußring Löcher freigelassen sind. Glatte, matte Patina, in der Hauptsache rotbraun, mit hell- und dunkelgrünen Stellen, am schönsten im Deckel, wo auch der Goldton der Bronze mitspricht. Gußnähte nicht zu erkennen, aber durch eine Verschiebung im Ornament an den Schmalseiten wahrscheinlich gemacht. Im Deckel (Tafel 34, c) und auf dem Boden (Tafel 34, f) der Bronze Inschrift: 吾(習)作尊壺 „Hsi (ließ) fertigen (diesen) edlen Hu." Vor Ch'in.

Ähnliche Typen u. a. Po-ku-t'u-lu XII, Hsi-ch'ing-ku-bien VIII.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

12.

TAFEL 14.

Glocke, Ch'un 錞.

Ganze Höhe 63, obere Durchmesser 32,8 und 27,6, untere Durchmesser 24,3 und 20, größte Durchmesser 36,2 und 32, größter Umfang 108 cm, Metallstärke etwa 4 mm, Gewicht 15,37 kg.

Im Grundriß oval. Auf der Haube zwei besonders gegossene langschwänzige, katzenartige Raubtiere mit Halsband, auf den Hinterschenkeln gravierter, durch eine Bogenlinie geteilter Kreis, auf den Beinen Schuppen. Die Platte mit vier gravierten Motiven: Schiff, Vogel, Fische, Pflanzen (Tafel 34, g-k). An den Schmalseiten Gußnaht. Glatte olivgrüne, teilweise verkrustete Patina.

Der Typ ist in China ziemlich häufig, ein Tigerpaar bisher noch nicht belegt. Schwerlich vor Han, wie die chinesischen Archäologen annehmen. Ein Ch'un der Sammlung Lo Chên-yü (Katalog Bd. III, 18) trägt die Zahl 24 in einer Schrifttype der Han.
Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

13.

TAFEL 15.

Glocke, Ch'un 錞.

Höhe 51, untere Durchmesser 20 und 17,5, obere Durchmesser 26,5 und 22, größte Durchmesser 32,8 und 27, größter Umfang 97 cm, Metallstärke etwa 4 mm, Gewicht 9,5 kg.

Ähnlich der vorigen. Nur ein Tiger auf der Haube, keine gravierten Zierate auf der Platte. Gußnähte auf den Schmalseiten. Grüne, glatte, glänzende Patina mit roten Flecken.

Erworben von Ernst Große in Peking. Geschenk eines ungenannten Freundes der Sammlung.
Ein drittes Ch'un der Abteilung befindet sich als Leihgabe im Münchener Museum für Völkerkunde.

14.

TAFEL 16.

Glocke, Chung 鐘.

Höhe 58, größter Durchmesser unten 28,2, oben 21,5, kleinster Durchmesser unten 21,6, oben 19,3, Höhe der Krone 20,5, Durchmesser unten 8, oben 6,6, Höhe der Warzen 4,5, Dicke der Warzen unten 2,3, oben 1,2, durchschnittliche Metallstärke 1 cm, Gewicht 18,95 kg.

Im Grundriß oval, mit leichter Zuspitzung nach den Schmalseiten. Die Felder zwischen den Warzenreihen, die sich auf der Rückseite wiederholen, sind mit Eckspiralen in leichtem Relief geschmückt. Ähnliche Ornamente auf der Haube der Glocke. Auf dem Wulstring T'ao-t'ieh-Maske, auf der Krone Blattmuster ähnlich Nr. 9, Tafel 11, mit Bandwerkfüllung, die Tierform nicht mehr erkennen läßt. Patina braunrot, glatt, mit dunkelgrünen Stellen und hellgrünen Punkten. Gußnähte an den Schmalseiten.

Geläufiger Typ.
Erworben von Ernst Große in Peking. Geschenk eines ungenannten Freundes der Sammlung.

15.

TAFEL 17.

Glocke, Chung 鐘.

Höhe 35,5, größter Durchmesser unten 25,3, oben 22, kleinster Durchmesser unten 21,5, oben 18, Höhe der Krone 10,2, Stärke der Krone 2,3, Metallstärke am unteren Rande 1,8 cm, Gewicht 11,5 kg.

Im Grundriß oval, nach den Schmalseiten spitz zulaufend. Auf dem unteren Felde halten zwei Drachen mit rückwärts gewandten Köpfen die Perle. In dem senkrechten Mittelfelde Wolkenmuster in leichtem Relief. Die Warzen haben die Form zusammengerollter Wasserdrachen Chih, in den freien Feldern Drachen. Um den oberen Rand Streifen mit brillenartigem Ornament. Auf dem Dache der Glocke ähnliches Motiv wie auf dem untersten Felde (abgebildet Tafel 34, l). Krone in Drachenform. An den Schmalseiten Gußnaht. Krone besonders gegossen. Dicke, krustige, dunkelgrüne Patina, darunter stellenweise hellgrüne Patina erkennbar. Vermutlich Han.

Geläufiger Typ.
Erworben von Ernst Große in Peking. Geschenk eines ungenannten Freundes der Sammlung.

16.

TAFEL 18.

Weingefäß, Chüeh 爵.

Ganze Höhe 30,2, größte Breite 19, größter Durchmesser 8, Höhe der Füße 11, Tiefe 13,6 cm, Metallstärke etwa 2 mm, Gewicht 1,410 kg.

Füße hohl. Auf dem Griffe deformierte T'ao-t'ieh-Maske, oben auf den Knäufen graviertes Sternmuster. Unter dem Griff Inschrift Tafel 34, d: 析父乙 „Hsi (für) Vater I." Gußnähte nicht zu erkennen. Glatte, graugrüne Patina, mit Lack verschönt. Der Fuß auf der Abbildung links am Ansatze gebrochen. Wahrscheinlich ältere Nachahmung.

Einer der häufigsten und ältesten Typen. Das Zeichen Hsi (Holzspalter) steht wahrscheinlich für Nachkommenschaft.
Erworben von Ernst Große in Peking. Geschenk eines ungenannten Freundes der Sammlung.

17.

TAFEL 19.

Dreifüßiger Kochkessel, Li 鬲.

Höhe 13–13,5, Durchmesser oben 17,2, Durchmesser der Mündung 13,3, Höhe der Füße 5,5, Tiefe innen 6,5 cm, Metallstärke etwa 3 mm Gewicht 1,2 kg.

Füße hohl, innen offen, ihre Innenansätze sind durch Grate (Gußnähte?) verbunden. Über jedem Fuße ein T'ao-t'ieh mit hohen, hohlem Kamme, nach beiden Seiten abgewickelt. Patina krustig, zum Teil mit kalkiger Erde bedeckt, an den freien Stellen blau, innen grün. Die Füße mit rotem Lehm gefüllt (Gußkern?) Vermutlich kurz vor Ch'in.

Nach ziemlich zuverlässigen Nachrichten aus dem großen Bronzefunde von Hsin-chêng in Honan, der in seinem Hauptbestande dem „Museum" von K'ai-fêng-fu übergeben wurde, und sich dort vielleicht noch befindet, aber zweifellos zu einem nicht unerheblichen Teile in Privathände kam. Vgl. Pelliot in T'oung-pao 1924, 256, derselbe Jades archaïques de la Chine, Paris 1925, 28 ff., wo auch die chinesische Literatur über den Fund sich verzeichnet findet. Eine dieser Bronzen wollen chinesische Gelehrte mit zweifelhaftem Rechte der Zeit um 575 v. Chr. und dem südlich gelegenen Königtum der Ch'u zuweisen. Zur Datierung der übrigen, meist sehr minderwertigen Bronzen trägt dieser Findling nichts bei.
Geläufiger Typ, einer der ältesten der Keramik. Gegenstück in der Sammlung.
Erworben 1927 in Peking.

18.

TAFEL 20 und 21.

Bronzebeschlag.

Länge 29, größte Höhe 13, größte Breite 8,8 cm, Metallstärke etwa 3 mm, Gewicht 915 g.

Der hohle im Durchschnitt ovale Vorderteil trägt ein T'ao-t'ieh in Relief. Die Vorderfläche ist vertieft zur Aufnahme eines verlorenen Zierstückes. Auf der Oberseite des brettförmigen Ansatzes ebenfalls T'ao-t'ieh, innen zwei blattförmige plastische Zierate. Reste der Gußnaht oben und unten. Patina moosgrün mit rötlichen Flecken. Vermutlich vor Chin.

Verwendung unbekannt. Ein ganz gleichartiges Stück der Sammlung Rutherston, London, s. Koop, Frühe Chinesische Bronzen, Berlin 1924, Tf. 26 A.

19.

TAFEL 22 und 23.

Gefäß unbekannten Namens und Zweckes.

Höhe 38, größter Durchmesser 24, Durchmesser der Mündung 12,4, Tiefe 34,5, größter Umfang 78, kleinster Umfang 34,5 cm, Metallstärke 3–4 mm, Gewicht 6 kg.

Den sehr merkwürdigen Zierat geben die Abbildungen deutlich wieder. Er ist in einer hellen Legierung in unterschnittene Vertiefungen eingehämmert, die Innenzeichung ist in der Bronze ausgespart. Das untere Feld ist von einer krustigen grau-grünen Patina bedeckt und scheint keinen Zierat zu tragen. Auf dem Deckel einige Reste von Tieren, die in derselben Technik eingelegt sind. Eine seltene Einzelheit ist die Nase, die in einen Randausschnitt eingreift und so den Deckel in seiner Lage festhält. Auf dem mittleren Wulste eine lange eingravierte Inschrift, die anscheinend sehr interessant, aber noch nicht vollständig entziffert ist (Tafel 35, a). Gußnähte nicht zu erkennen. Die Patina ist von dem Vorbesitzer größtenteils weggeschliffen, um den Zierat bloßzulegen. Nach dem Charakter der Schrift vermutlich Ch'in.

Gegenstücke bisher nicht bekannt. Zu vergleichen sind etwa das sog. Tou Hsi-ch'ing-ku-chien XXIX, 29 und ein Becken in der Freer Art Gallery, Washington, abgebildet im J-shu-ts'ung-pien, Abt. I, Bd. II.
Erworben bei Marcel Bing in Paris 1913. Geschenk eines ungenannten Freundes der Sammlung.

20.

TAFEL 24.

Flasche unbekannten Namens und Zweckes.

Höhe 25, größte Breite 29, größte Dicke 9, Durchmesser der Mündung 8,5, Tiefe 20,5 cm, Metallstärke etwa 1,5 mm, Gewicht 2,895 kg.

An den Schmalseiten T'ao-t'ieh-Masken als Halter für die verlorenen Griffringe. Im Boden in männlichen (plastischen) Zeichen die Inschrift Tafel 34, c: 年未央 „Das Jahr (oder die Jahre) noch nicht zur Hälfte". Gußnähte nicht zu erkennen. Glatte, matte, blaugrüne, streifige Patina mit braunen Wolken und grünen und blauen Flecken. Vermutlich Han.

Obwohl der Typ zweifellos erst der Han-Zeit angehört, nennen ihn die chinesischen Archäologen mit verschiedenen Namen. Nicht sehr häufiger Typ, vgl. z. B. Po-ku-t'u-lu XIII, Hsi-ch'ing-ku-chien XXI, Hsü-chien X, 41.
Erworben von Ernst Große in Peking. Geschenk eines ungenannten Freundes der Sammlung.

21.

TAFEL 25.

Waschbecken, Hsi 洗.

Höhe 16,1, oberer Durchmesser 36, Tiefe 15,3, Umfang 98 cm, Metallstärke 2–3 mm, Gewicht 5,95 kg.

An den Seiten in leichtem Relief T'ao-t'ieh-Köpfe mit Ösen für die verlorenen Griffringe. Innen auf dem Boden zwei Fische in ganz flachen Relieflinien (s. Tafel 35, d). Gußnähte nicht zu erkennen. Matte krustige seegrüne Patina mit blauen Flecken. Vermutlich Han.

Häufiger Typ. Erworben von Ernst Große in Peking. Geschenk eines ungenannten Freundes der Sammlung.

22.

TAFEL 26.

Waschbecken, Hsi 洗.

Höhe 16,5, oberer Durchmesser 37,8, Tiefe 16, Umfang 100 cm, Metallstärke etwa 2 mm, Gewicht 1,91 kg.

Ähnlich voriger Nummer. Patina dunkler, innen phantastische Malachitwucherungen. Die Bronze teilweise vollkommen aufgezehrt. Vermutlich Han.

Sammlung Machida – Hayashi – Meyer/Große. Geschenk Meyer/Große.

23.

TAFEL 27.

Kolossale Pauke, Tung-Ku 銅鼓.

Höhe 68, Durchmesser der Schlagplatte 127, größter Umfang 376, kleinster Umfang 338 cm, Metallstärke etwa 5 mm, Gewicht nicht festgestellt.

Die Schlagplatte ist in 16, der Körper in 27 Zonen eingeteilt, die durch je drei Kreislinien in leichtem Relief geschieden sind. Jede Zone trägt einheitlichen Zierat, der durch Eindrücken von kleinen Modeln in die Wachsform hergestellt ist. Die Modeln zeigen 8 Motive geometrischer Art, eine Blüten, eine Münzen vom Käsch-Typ. Am Körper, etwa 18 cm vom oberen Rande beiderseits je zwei 8 cm lange, breite Bügel zum Durchstecken von Tragestangen. An den beiden anderen Seiten, nicht ganz senkrecht zur Verbindungslinie der Bügel, etwa 12 cm vom unteren Rande kleinere Ösen. Auf der Schlagplatte in der Mitte ein großer Stern, am Rande sechs Frösche, von denen zwei auf dem Rücken kleine Frösche tragen. Deutliche Gußnaht in der Mitte zwischen den Bügelpaaren. Grüne matte Patina. Zahlreiche Ausbesserungen von Gußfehlern. Vermutlich späte Hanzeit. Nach verläßlicher Nachricht aus Nan-ning-fu, Provinz Kuangsi.

Über diesen eigenartigen Paukentyp, der von südchinesischen Barbarenstämmen stammt, aber von den Chinesen selbst und im indischen Archipel nachgeahmt worden ist, vgl. vor allem Hirth in den Mitteilungen des Orientalischen Seminars, Ostasiatische Studien VII, 200 ff. und Heger, Alte Metalltrommeln aus Südasien, Wien 1902. Die Bronze ist das größte chinesische Exemplar.
1904 von Ernst Große in Kanton erworben. Geschenk der Frau Marie Meyer.

24.

TAFEL 28.

Leuchter, Têng 燈, in Form eines Widders.

Ganze Länge 13, größte Höhe 9,8 cm, Metallstärke etwa 1,5 mm, Gewicht 355 g.

Der Rücken ist an einem Scharnier um den Hinterkopf drehbar. Hochgeklappt liegt er auf dem Scheitel auf und bildet die Schale für das Öl (s. Abb.). Der Docht wurde vermutlich an dem Dorne (in der Abbildung punktiert) festgesteckt und brannte in einer Kerbe am rückwärtigen Ende der hochgeklappten Schale. Klappte man den Rücken wieder zu, so floß das Öl in den Rumpf des Widders zurück. Mit dem Stichel gravierte Andeutung des Fließes. Die Öse auf dem Rücken diente wohl als Halt einer Kette. Patina hellgrün mit hellblauen Stellen. Han.

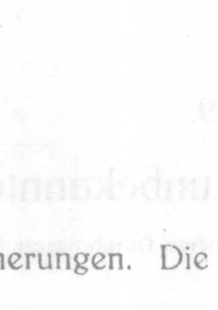
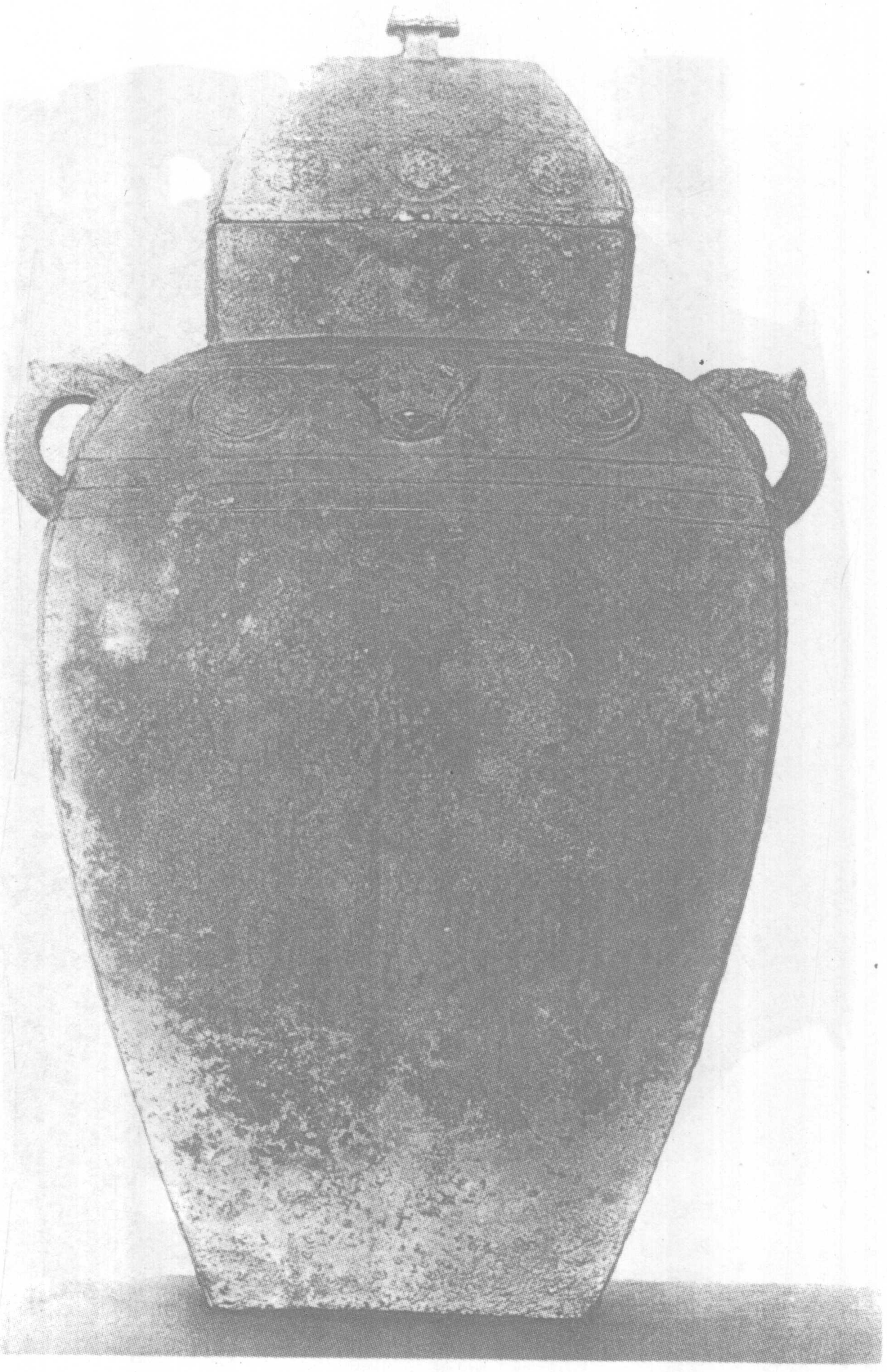


Abb.

Vgl. Reidemeister, Berliner Museen XLVIII, 38, der die Bronze aber irrtümlich für ein Räuchergefäß hält. Die Datierung gibt das Chin-so Heft III nach Kao-ku-t'u abgebildete Têng mit dem Datum 49 v. Chr. Eine Lampe ähnlicher Konstruktion, aber einfacher Form in der Sammlung Ginsberg, Berlin, auch in chinesischen Bronzewerken.
Erworben im Berliner Kunsthandel.

1



H. 45 cm

25.

TAFEL 29—31.

Behälter für Spiegel, Toilettengerät und Schmuck, Lien 奩, gold- und silberplattiert, graviert und bemalt.

Ganze Höhe 21,2, Unterteil mit den Füßen 13,7, Füße 2,4, Durchmesser 17,8, Tiefe 11 cm, Metallstärke etwa 2 mm, Gewicht 1,6 kg.

Goldplattiert, mit Wolkenbändern in Silberplattierung. Umrisse mit dem Stichel graviert. Auf dem mit Führungsrand versehenen Deckel drei aufgenietete Vögel, in der Mitte ein etwas größerer vierter als Griff; dieser mit gravierten Einzelheiten. Der Deckel ist in vier Zonen geteilt, abwechselnd mit Dreiecksmuster und Wolkenbändern in Silberplattierung und Gravierung. Innen trägt er auf Zinnobergrund in Grün mit schwarzer Innenzeichnung einen Vogel. Die Einfassung bildet ein Rauten- und ein Wolkenband. Die Malerei des Inneren hat die Versinterung großen Teils unkenntlich gemacht. Sichtbar ist oben ein Rautenband und ein Vogelfries. Auf dem Boden außen ein Vogel in zwei verschiedenen Grün mit schwarzer Innenzeichnung auf Zinnobergrund (Tafel 31). Die Füße haben die Form hockender Bären. Gußnähte nicht zu erkennen. Patina grün, blau und grauviolett. Han.

Ähnliche Lien finden sich auch auf Han-Reliefs abgebildet, u. a. auf der 114 n. Chr. datierten Grabplatte des Ehepaares Tai in der Sammlung Yi Yuan (With, Tafel 1). Ein Lien ohne Deckel und ohne Bemalung, im übrigen ganz gleichartig, besaß 1926 die Kunsthandlung Ton Ying in New York. Auf dem Boden trägt es eine längere Inschrift in Silbertausia mit einem Datum, das dem Jahre 41 v. Chr. entspricht. Ein gelacktes Lien von wesentlich abweichender Form aber mit dem gesamten Inhalt hat sich in Lo-lang (Korea) gefunden. In Einzelheiten mehr oder weniger abweichende Bronze-Lien ähnlicher Form und Verzierung in den Sammlungen Fujii, Kyôto, Eumorfopoulos, London (Abb. Koop, Alte Chinesische Bronzen, Tafel 86, 87), Sumitomo, Osaka (Abb. Senoku Seishô N. 132, Kokka H. 332, 333), und in der Freer Art Gallery, Washington.
Erworben 1927 in Peking.

26.

TAFEL 32.

Gansbeinleuchter, Yen-tsu-têng 雁足燈, Arbeit des Hofkünstlers I Chien 錡建 in Ch'ang-an, datiert 61 v. Chr.

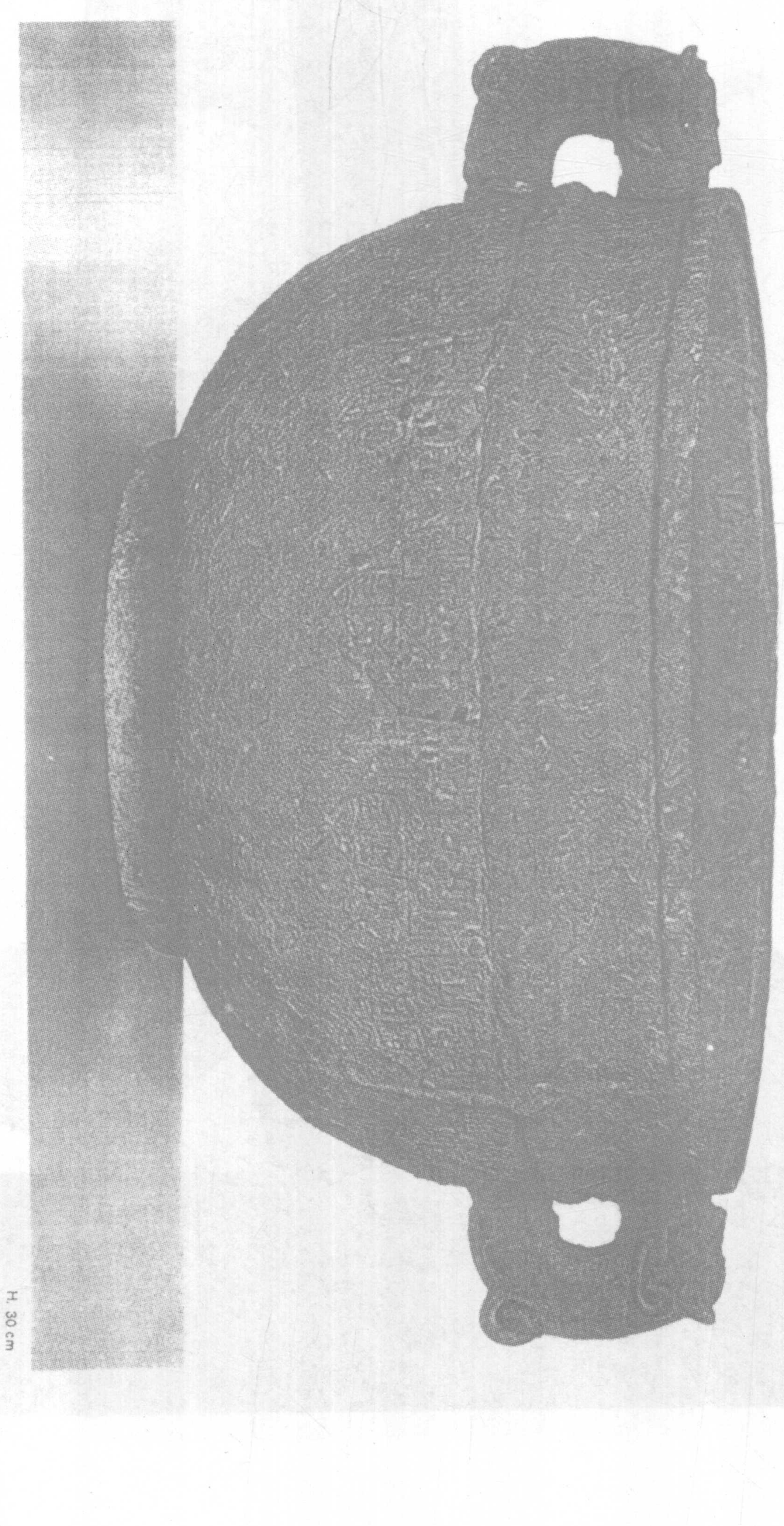
Höhe 23,3, Durchmesser der unteren Schale 21,5, der oberen Schale 13,1 cm, Metallstärke etwa 2 mm, Gewicht 2,08 kg.

Form und Zierat sind aus der Tafel ersichtlich. Das gravierte Dreiecksmuster am Knaufe wiederholt sich an der Außenseite der Ölschale, ebenso die gepunzten Kreise dazwischen. In der Mitte der Ölschale ein kurzer Dorn, wohl zum Feststecken des Dochtes. Auf dem Rande der unteren Schale eingravierte Inschrift (Tafel 35, b.): 長安下領宮銅雁足燈重十斤五兩神爵元年工錡建造. „Ch'ang-an [Hauptstaat der 1. Han, beim heutigen Hsi-an-fu in Shensi] Hsia-ling-Palast, Bronze Gansbeinleuchter, Gewicht 10 Pfund 5 Lot, Shên-chüeh 1. Jahr (61 vor Chr.), Meister I Chien fecit." Patina krustig, versintert, grün mit roten und purpurnen Stellen. Bronze stellenweise völlig aufgezehrt.

Eine Arbeit desselben Meisters aus demselben Jahre und demselben Palaste in der früheren Sammlung Tuan Fang (Katalog VI, 48). Die in den chinesischen Bronzewerken abgebildeten Gansbeinleuchter sind wesentlich einfacher gestaltet. Ihnen fehlt der Träger aus Drachenköpfen (vgl. z. B. Chin-so III).
Erworben 1927 in Peking. Geschenk des Herrn Herbert Gutmann, Potsdam.

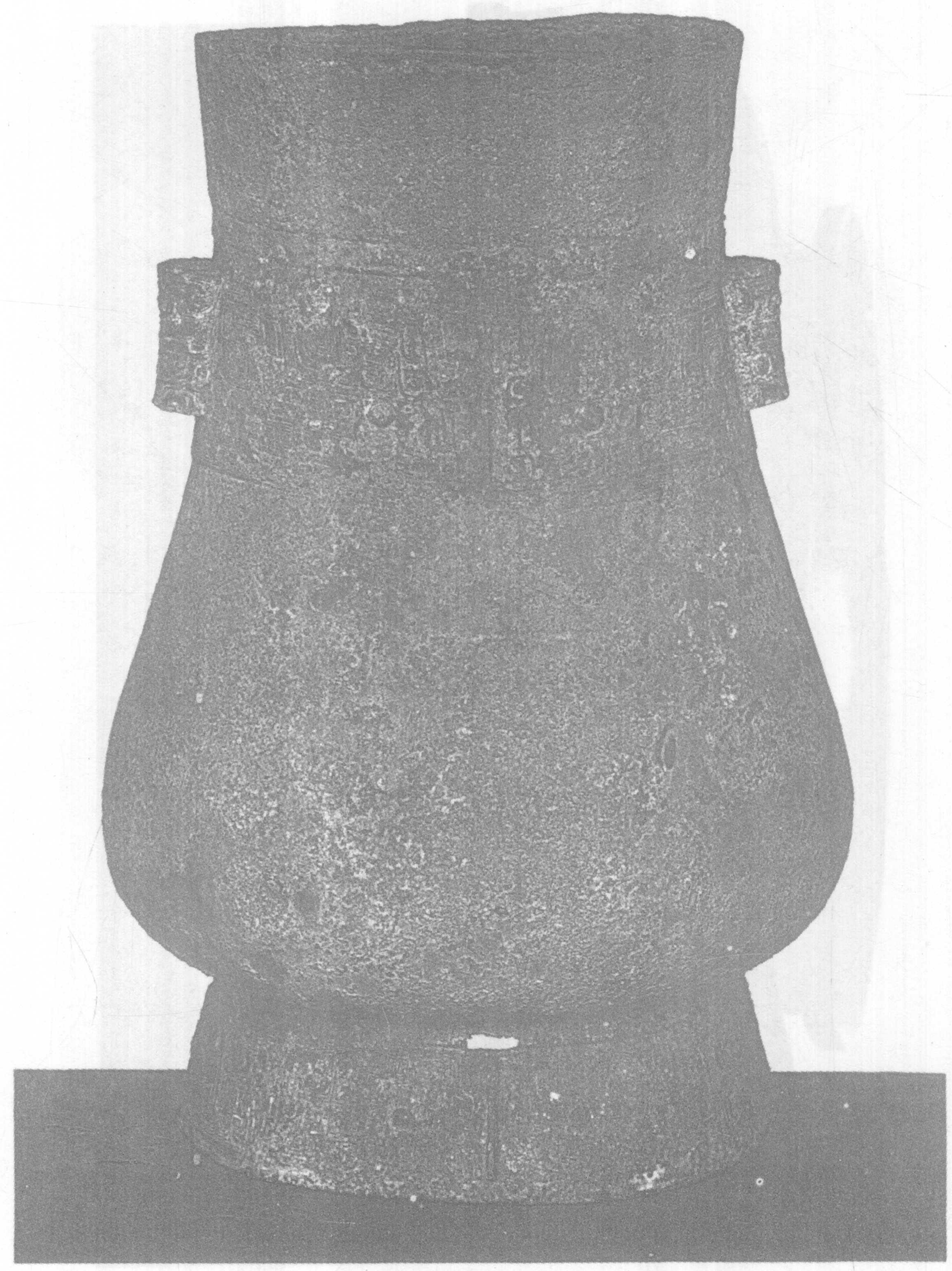
16

3



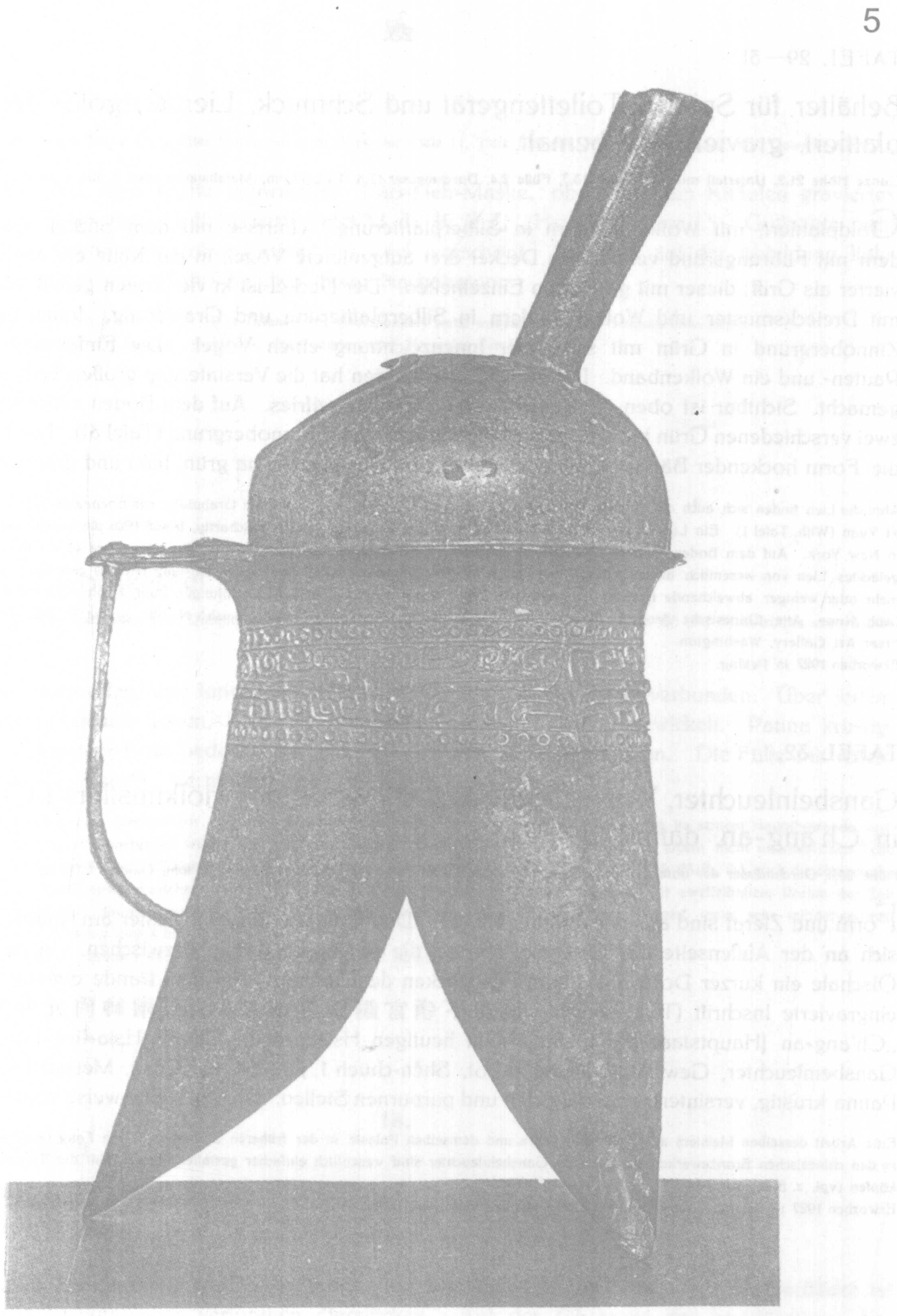
H. 30 cm

2



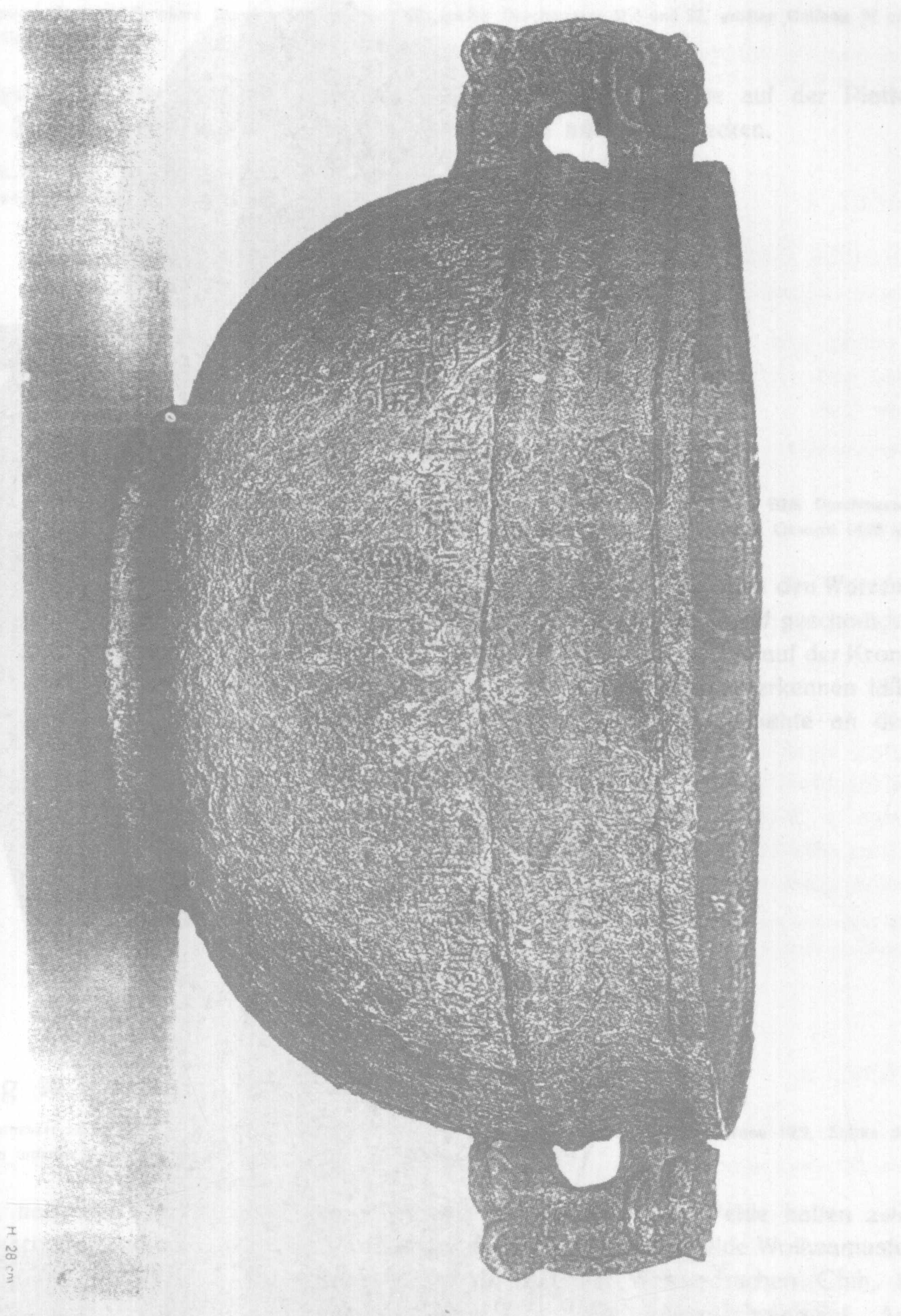
H. 36 cm

5

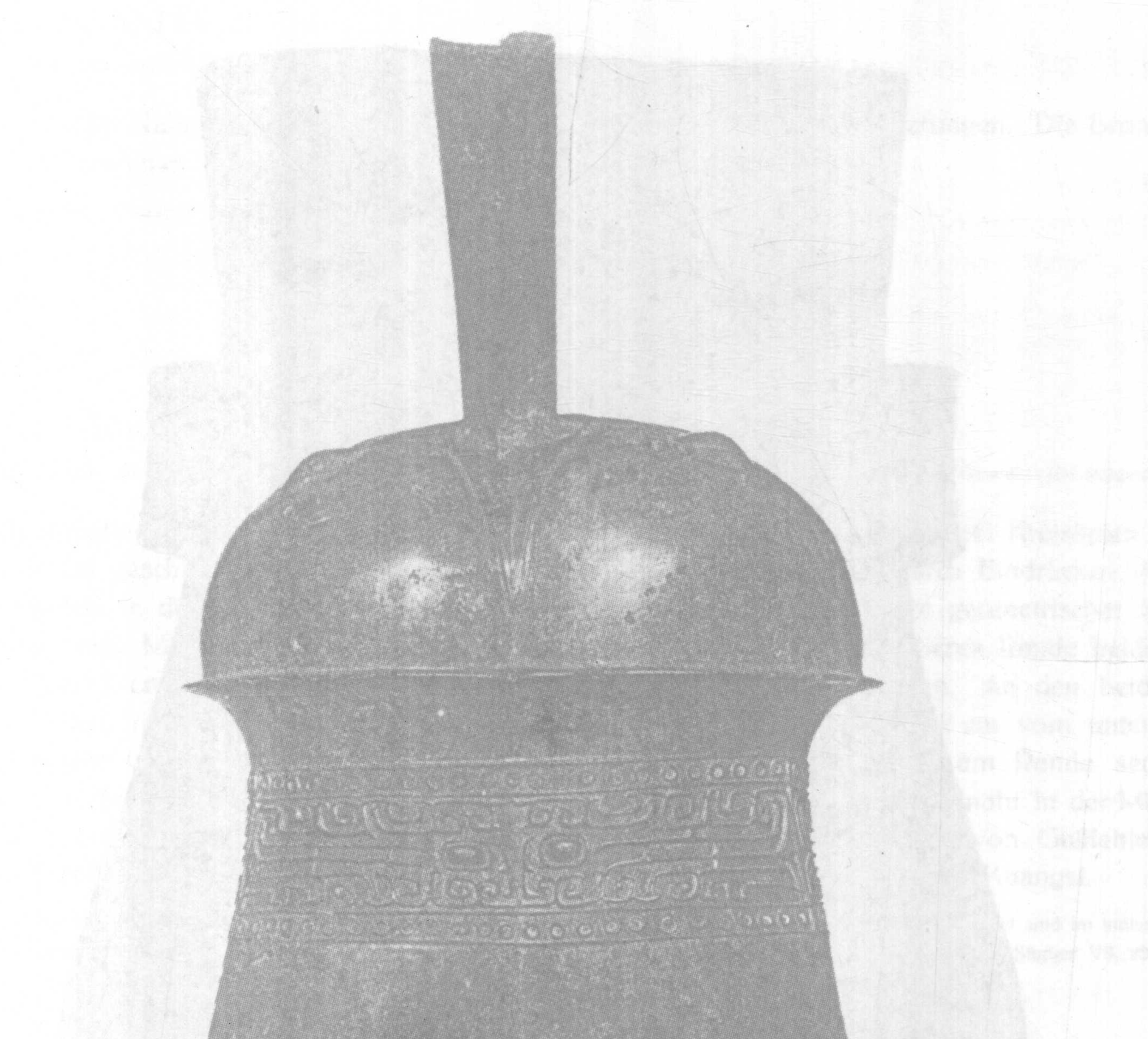


H. 31,7 cm

4

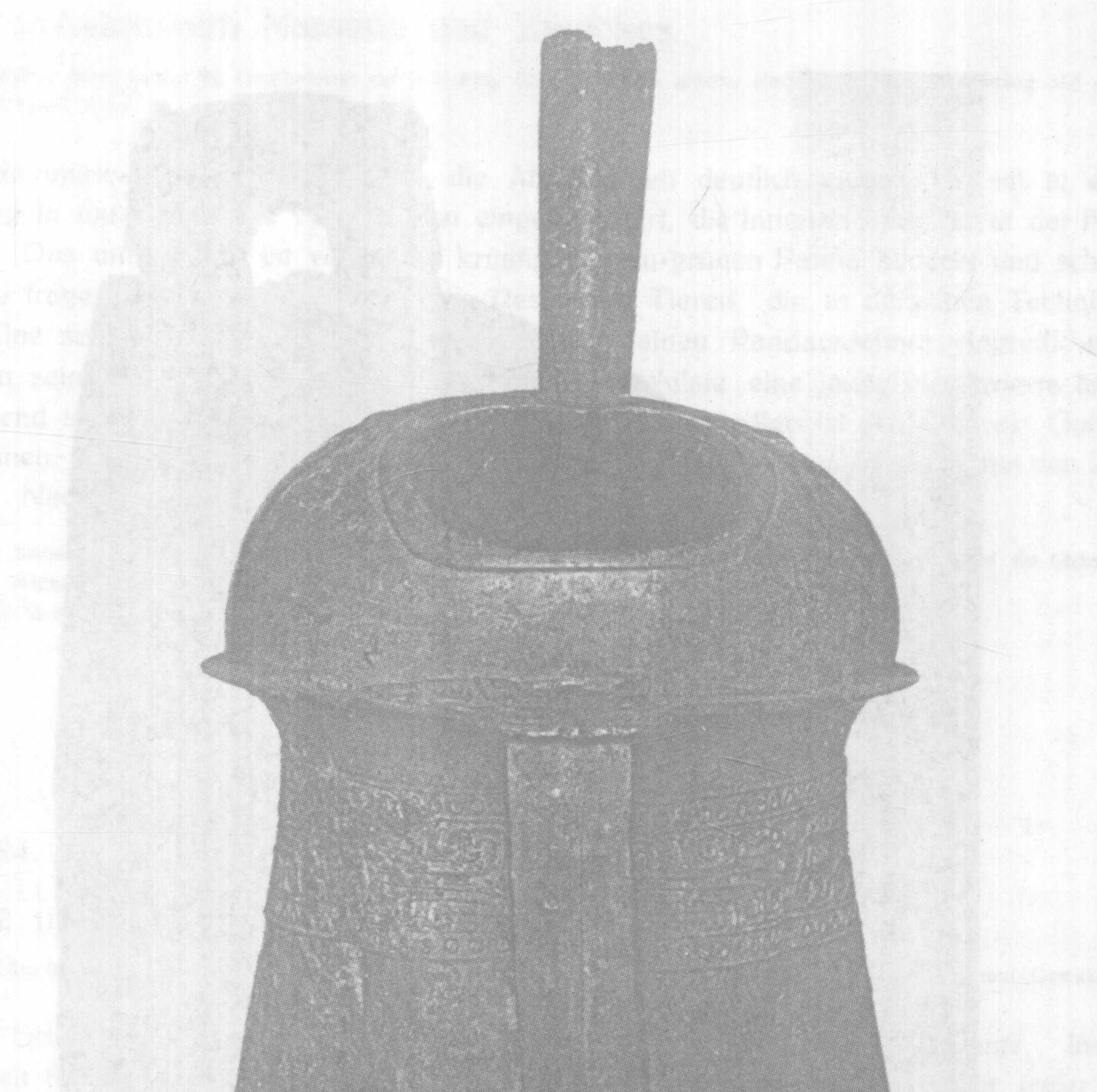


7



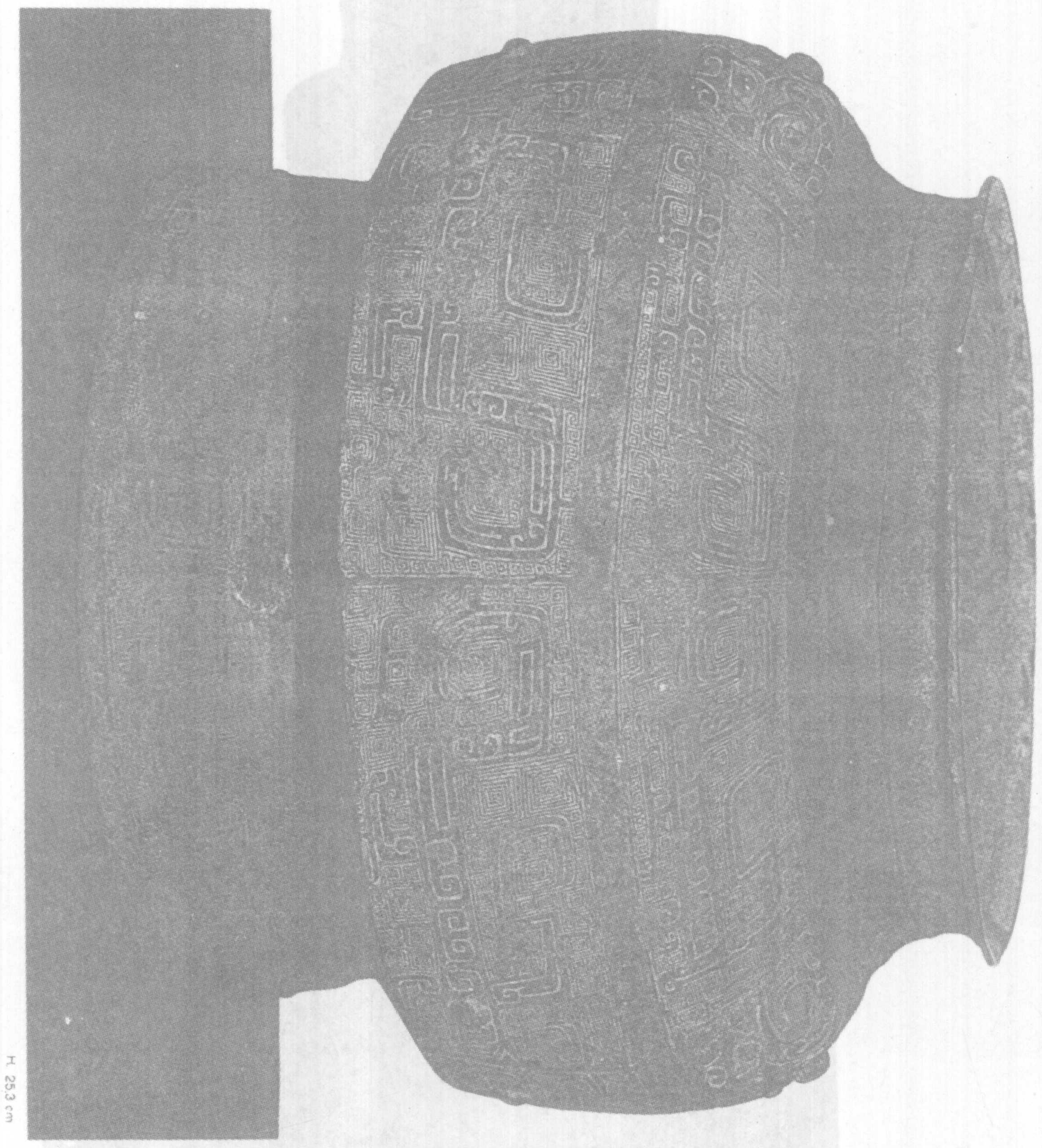
H. 31,7 cm

6



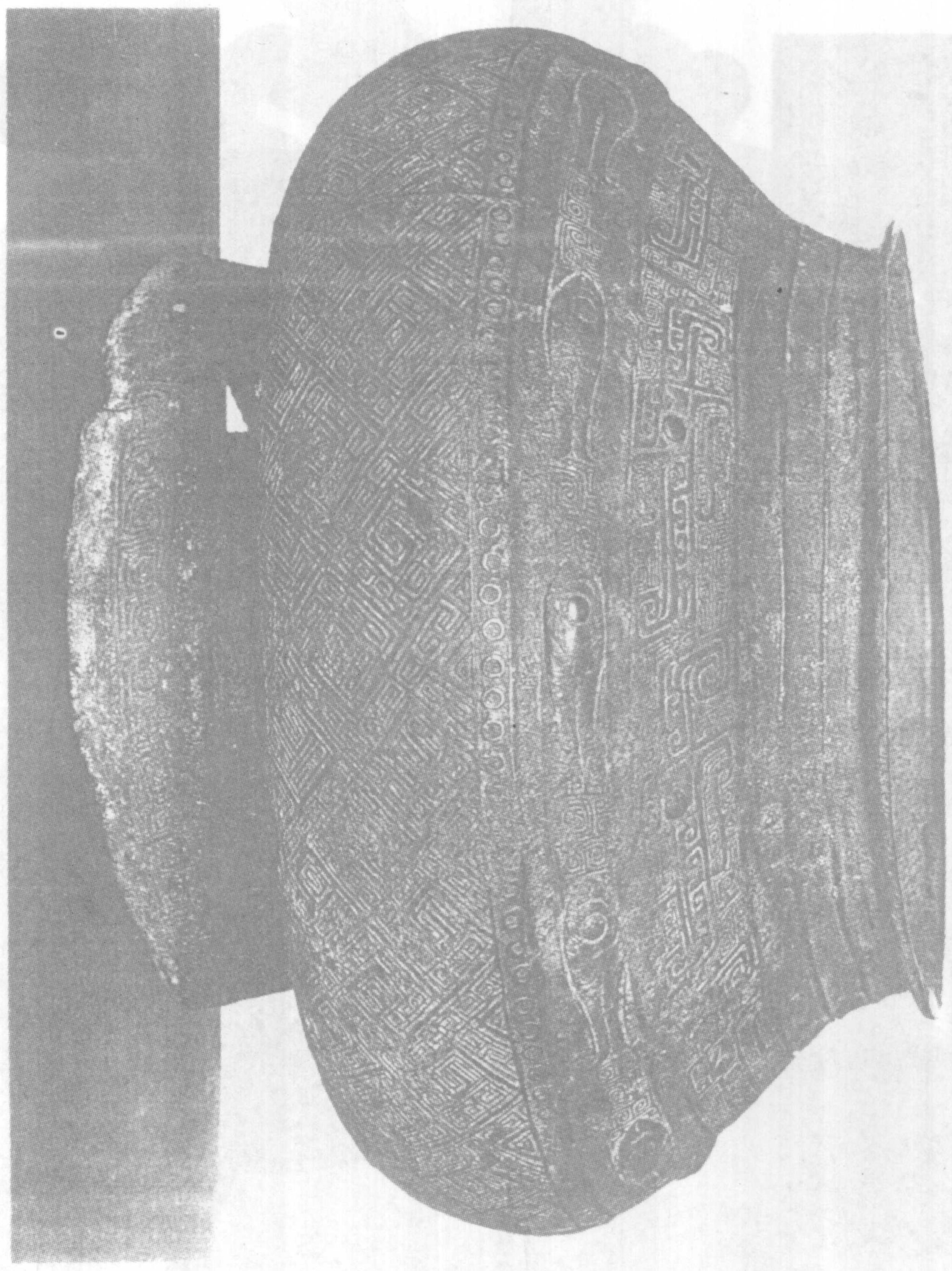
H. 31,7 cm

8



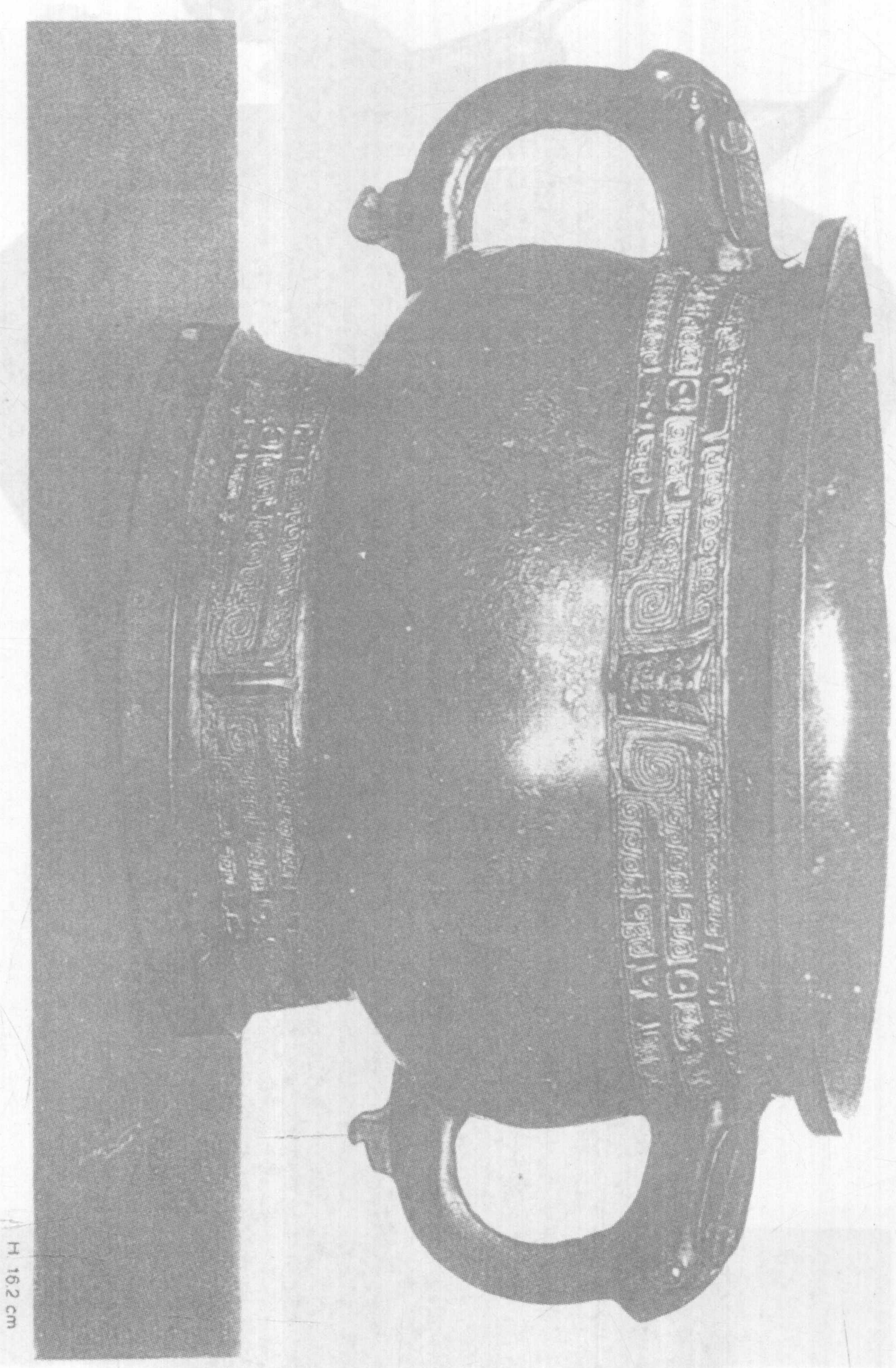
H. 25,3 cm

9



H. 19,3 cm

10



H. 16,2 cm

11



H. 39 cm

12



H. 28.4 cm

13



H. 34.7 cm

14



H.53.5cm

15



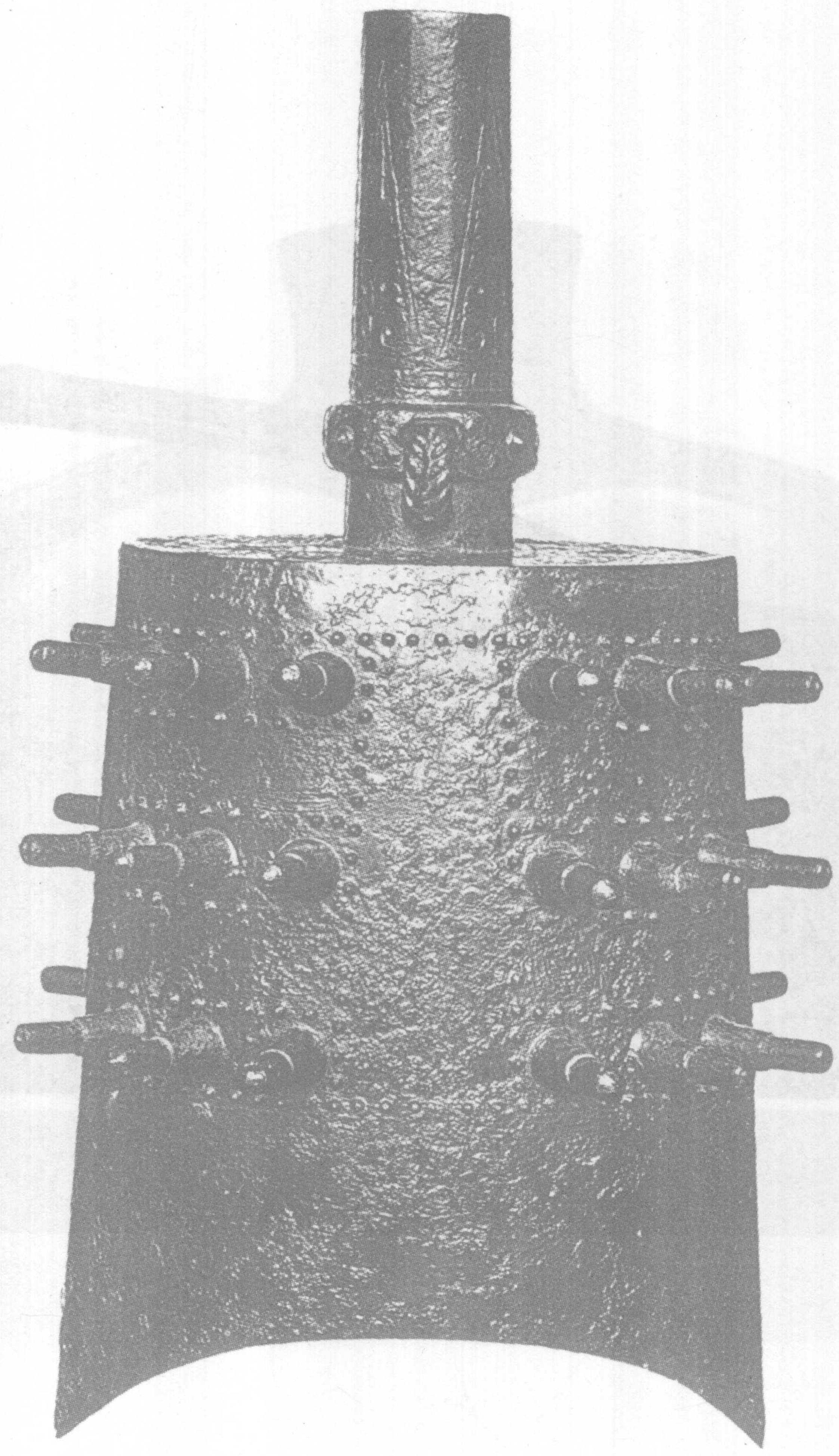
H.51cm

17



H. 35.5 cm

16



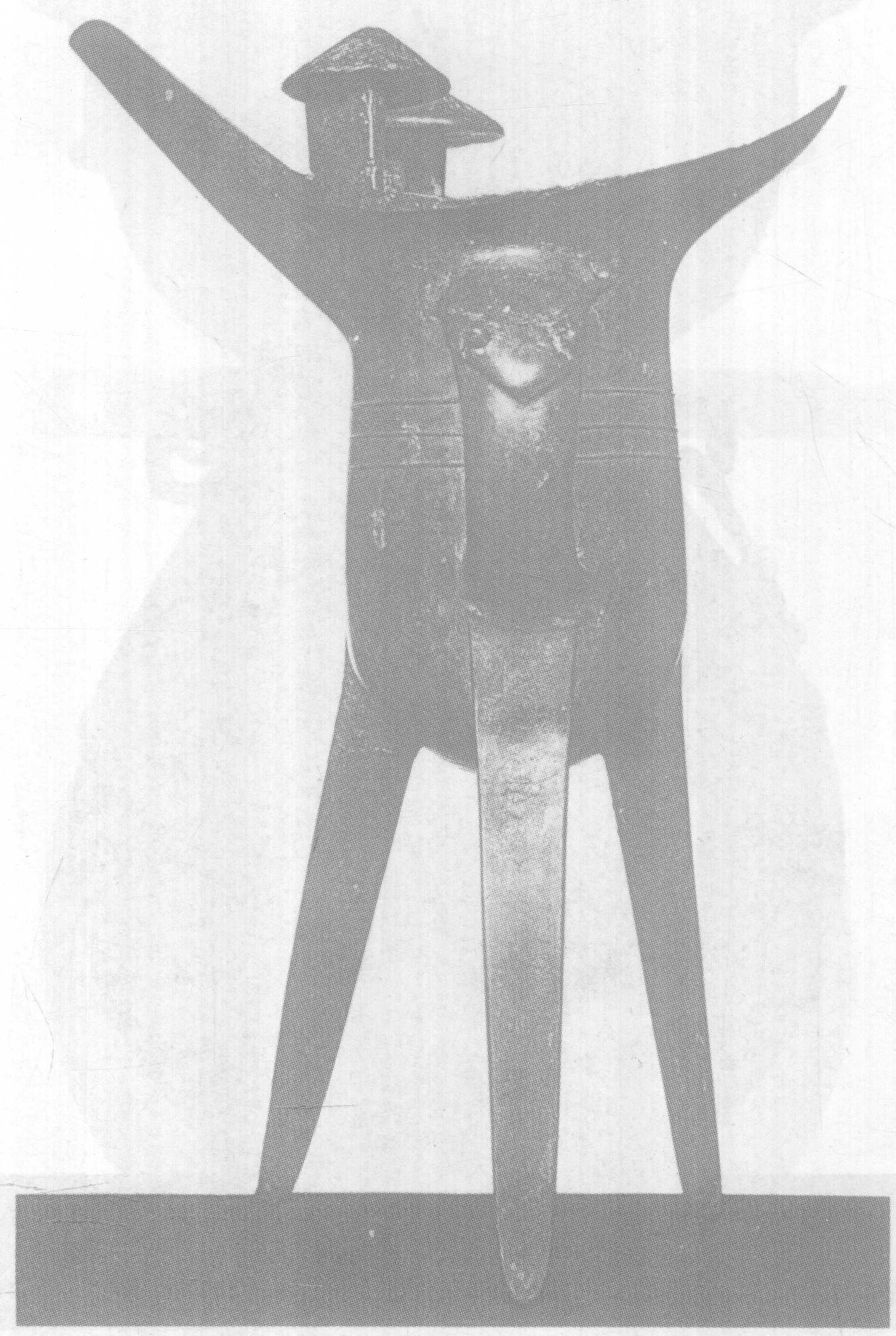
H. 58 cm

19



H.13.8cm

18



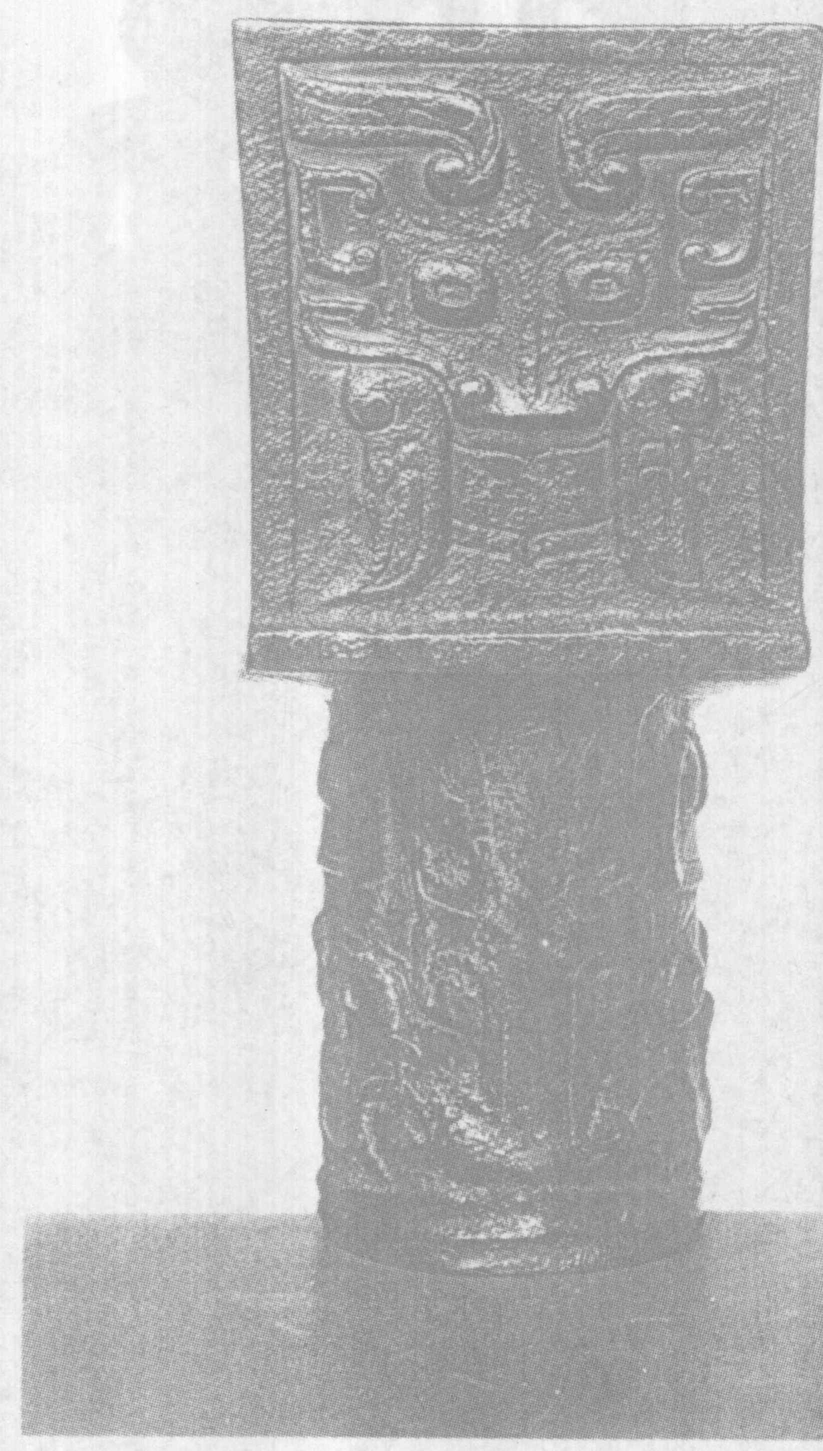
H. 30.2 cm

21



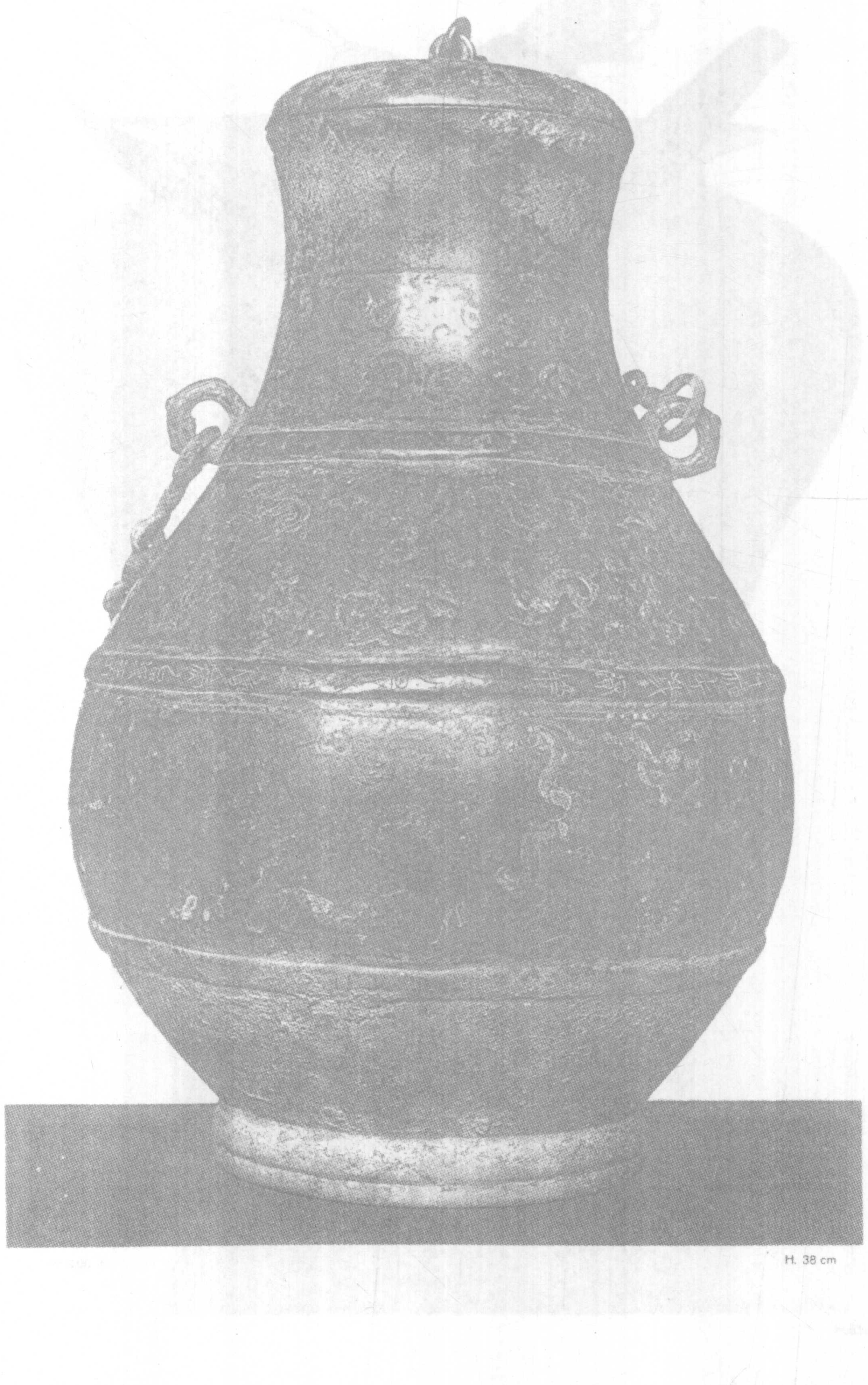
H. 20 cm

20



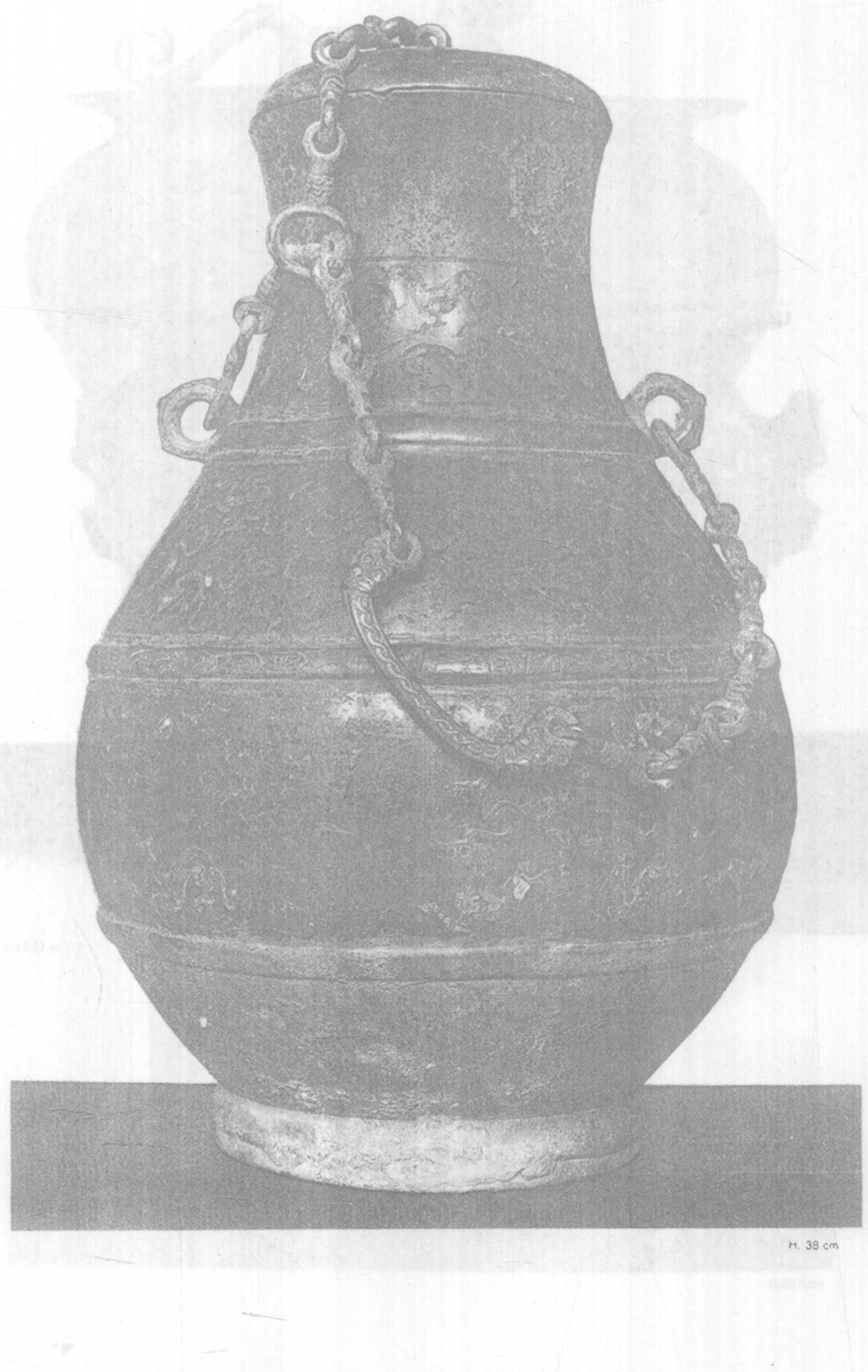
H. 20 cm

23



H. 38 cm

22



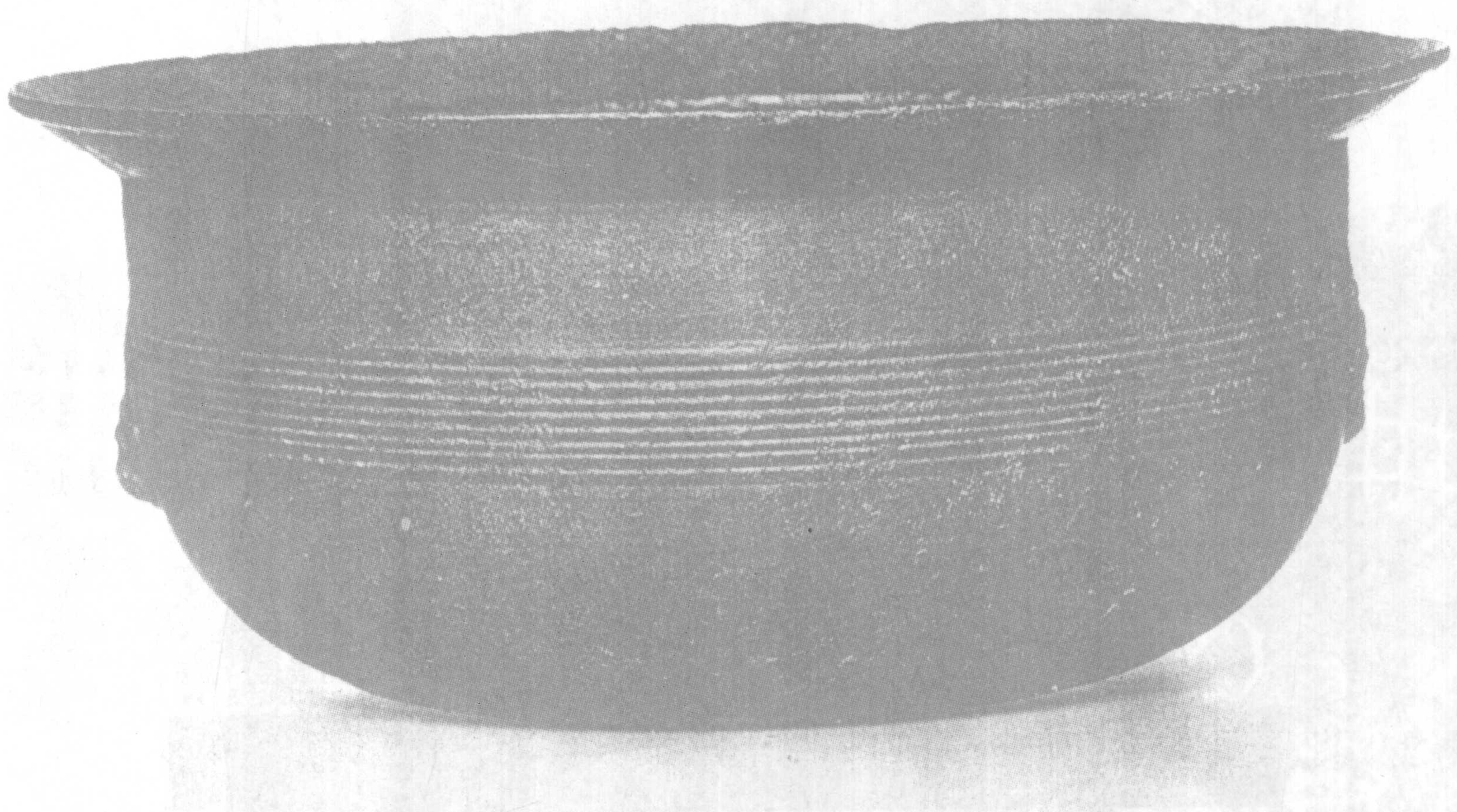
H. 38 cm

24



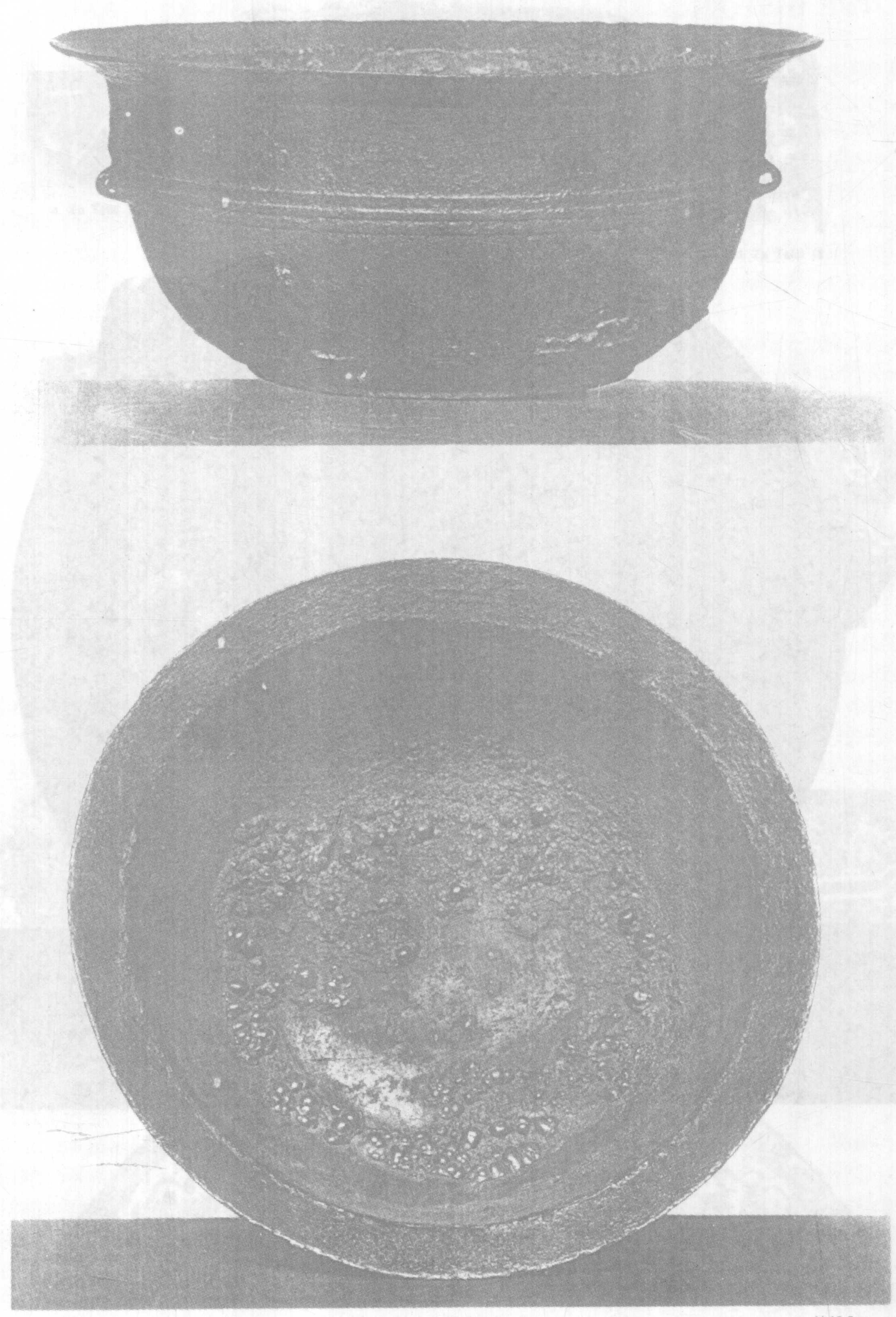
H. 24,8 cm

25



H. 16,3 cm

26



H.16.5cm

27



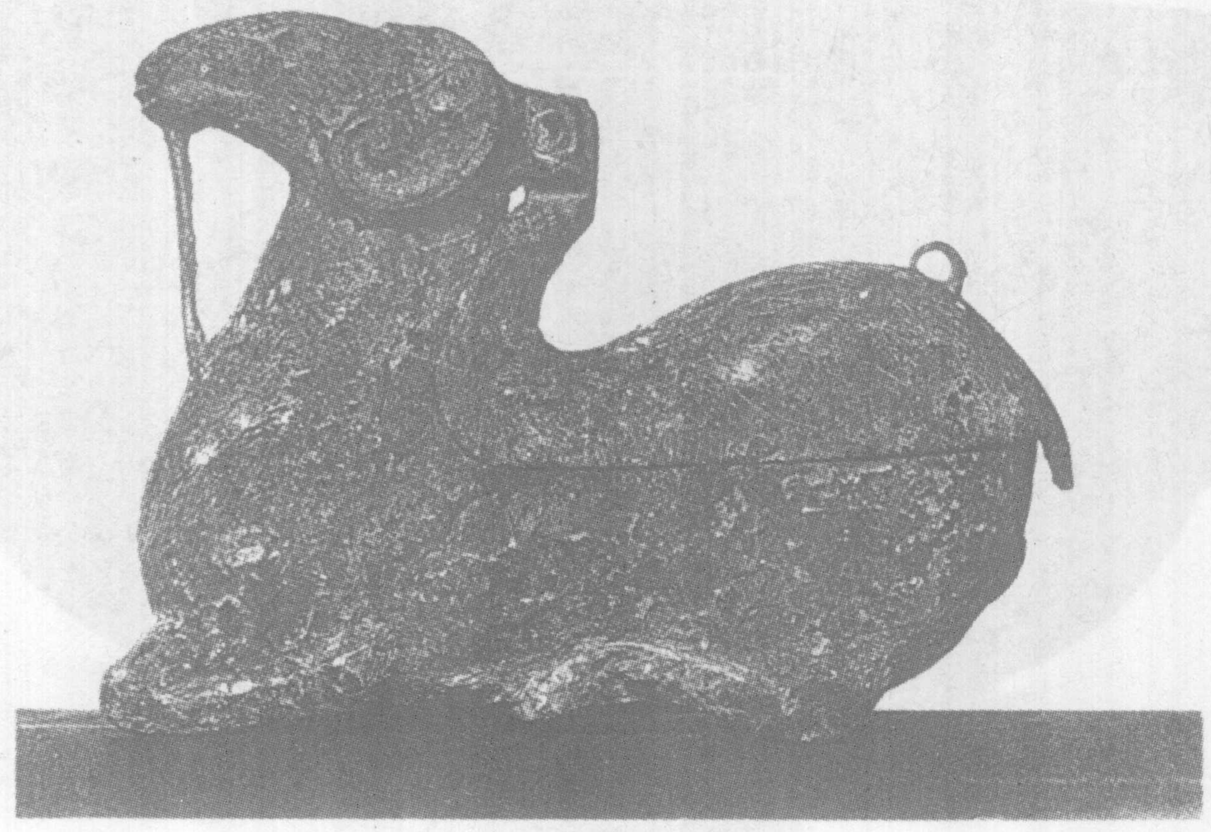
H. 68 cm

29



H. 21 cm

28



H. 9,8 cm

31



30

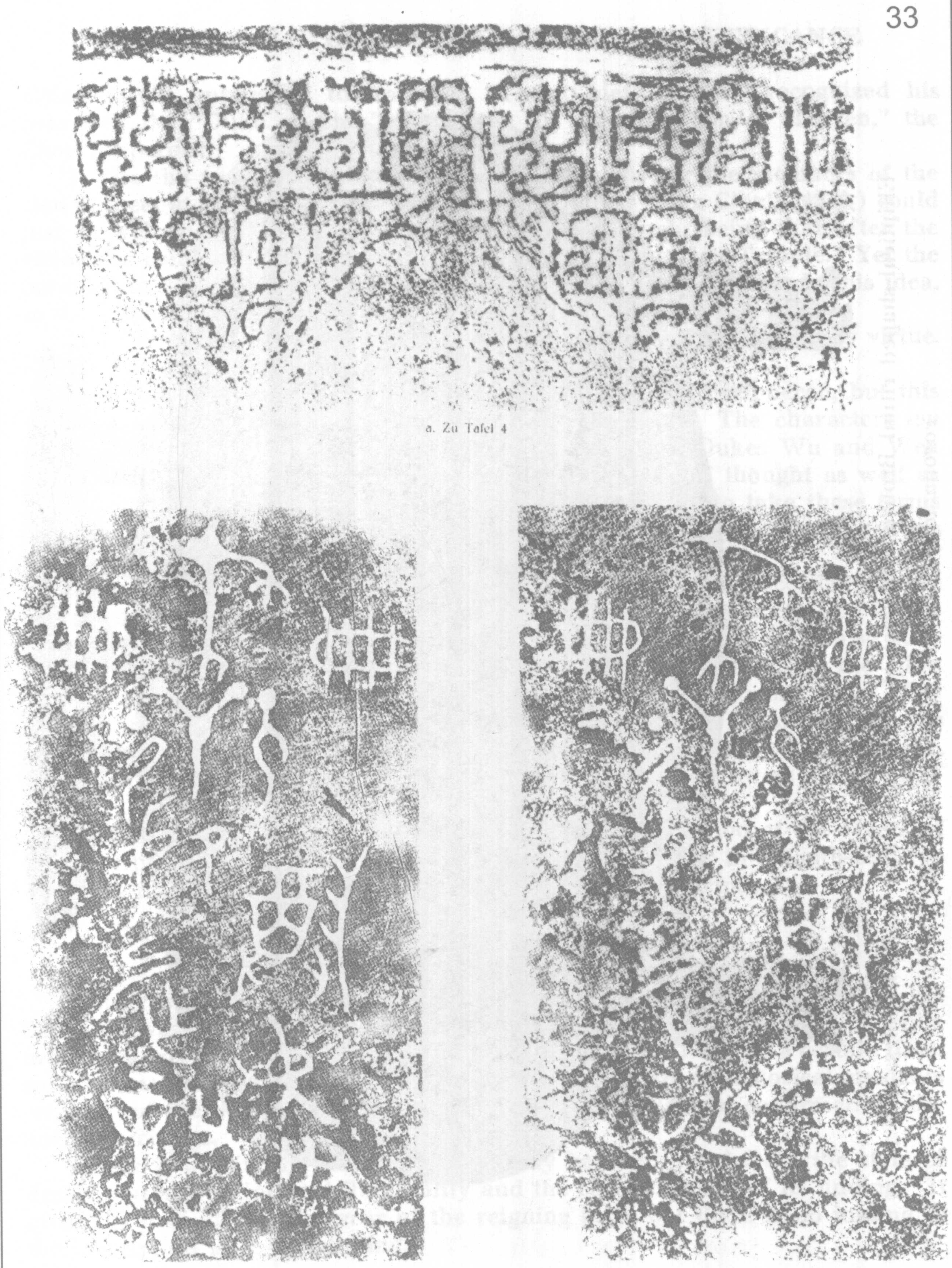


32



H 25 cm

33

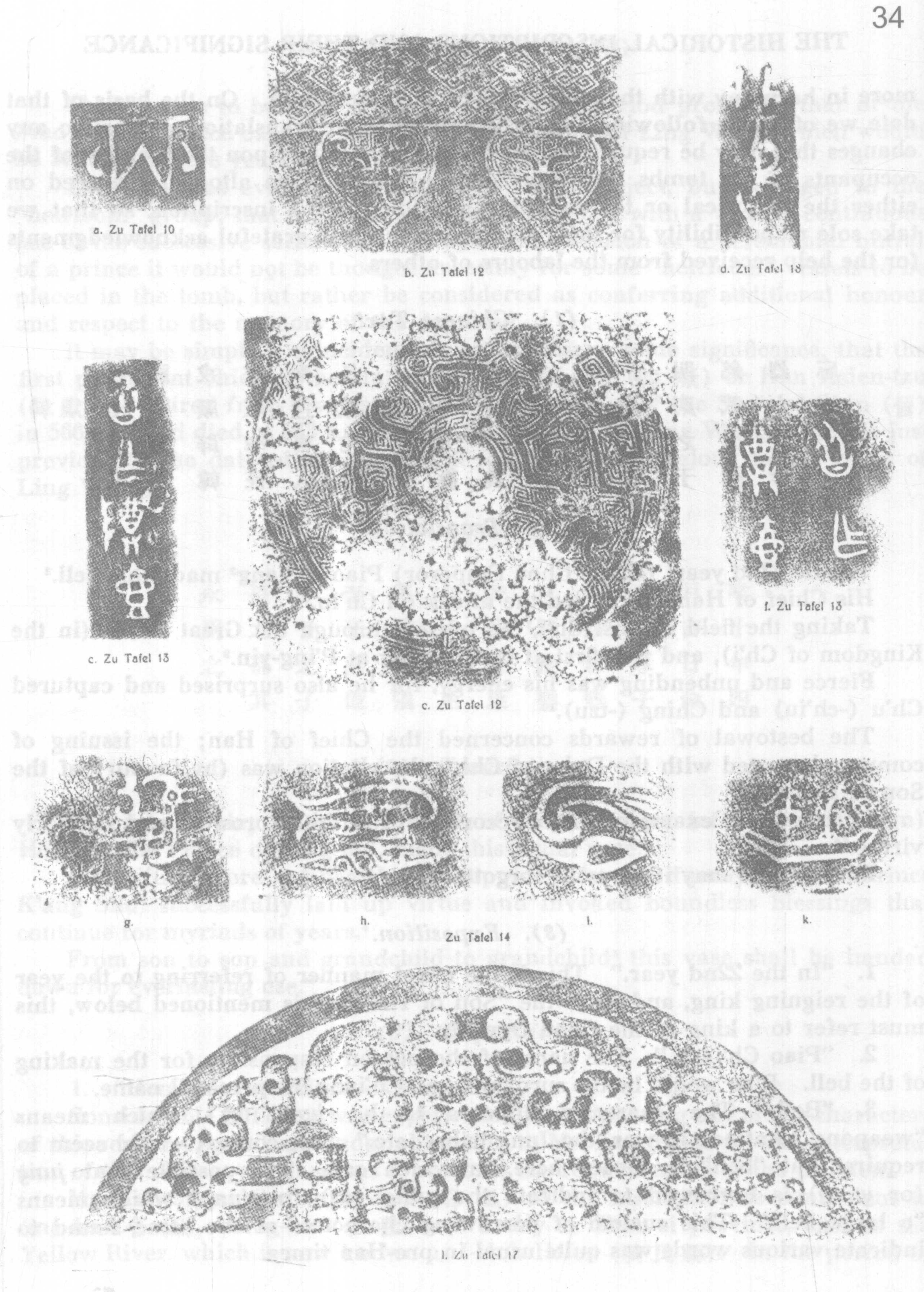


a. Zu Tafel 4

b. Zu Tafel 3

c. Zu Tafel 4

34



a. Zu Tafel 10

b. Zu Tafel 12

d. Zu Tafel 13

e. Zu Tafel 13

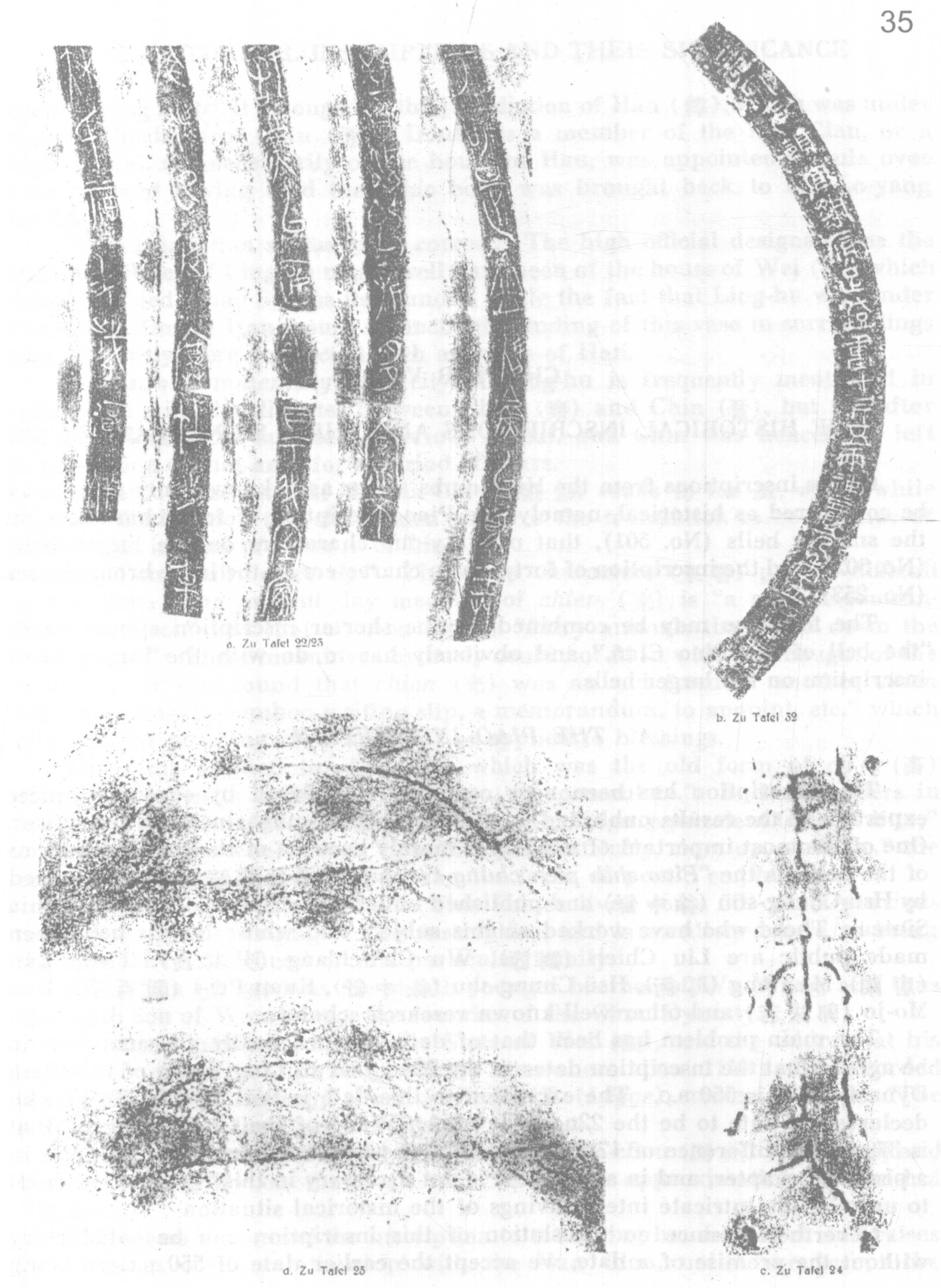
c. Zu Tafel 12

f. Zu Tafel 13

g. h. i. k. Zu Tafel 14

l. Zu Tafel 17

35



a. Zu Tafel 22/23

b. Zu Tafel 32

d. Zu Tafel 23

c. Zu Tafel 24

TOMBS OF OLD LO-YANG

A Record of the Construction and Contents of a group of Royal Tombs at Chin-ts'un, Honan, probably dating 550 B.C.

By

WILLIAM CHARLES WHITE

Sometime Bishop of Honan,

Associate Professor of Archaeology (Chinese), University of Toronto,

Keeper of the East Asiatic Collection of the Royal Ontario Museum.

FOREWORD

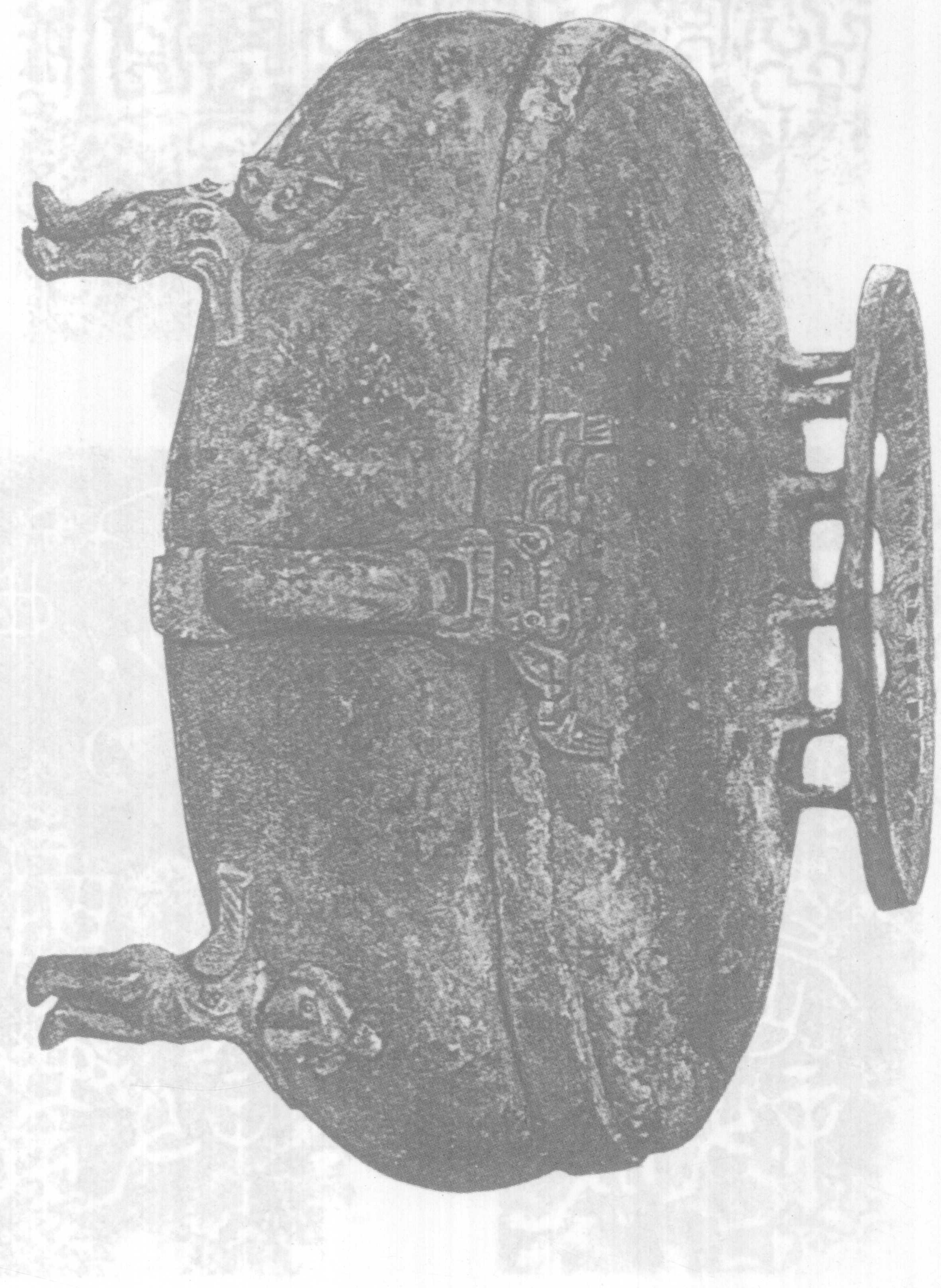
By

JOHN C. FERGUSON

KELLY & WALSH, LIMITED

SHANGHAI

1934



Elliptical-shaped ritual Bronze, with feet of harpies, animal mask handles, and a corona topped cover. (See number 231).

CHAPTER VII.

THE HISTORICAL INSCRIPTIONS AND THEIR SIGNIFICANCE.

Of the inscriptions from the Han tombs as far as is known only three may be considered as historical, namely, the Piao inscription of four characters on the smaller bells (No. 501), that of sixty-one characters on the larger bells (No. 502), and the inscription of forty-seven characters on the large bronze vases (No. 253).

The first two may be combined, as the shorter inscription simply reads "the bell of the Piao Clan," and obviously has to do with the longer Piao inscription on the larger bells.

A. *THE PIAO INSCRIPTION.*

This inscription has been very carefully considered by several Chinese experts, and the results published in various Chinese magazines and brochures. One of the most important of the latter, mainly because of its fine illustrations of the bells, is the "*Piao shih pien chung t'u shih*" (驫氏編鐘圖釋), prepared by Hsü Chung-shu (徐中舒) and published under the auspices of the Academia Sinica. Those who have worked on this subject and whose results have been made public are Liu Chieh (劉節), Wu Ch'i-ch'ang (吳其昌), T'ang Lan (唐蘭), Ma Heng (馬衡), Hsü Chung-shu (徐中舒), Kuan Pei-i (關百益), Kuo Mo-jo (郭沫若) and other well-known research scholars.

The main problem has been that of date, but practically all seem now to be agreed that the inscription dates to the 22nd year of Ling Wang of the Chou Dynasty, that is 550 B.C. The exception to this date is that of Kuo Mo-jo who declares the date to be the 22nd year of An Wang of the Chou Dynasty, that is 379 B.C., a difference of 171 years. This question has been touched upon in a previous chapter, and in any case it is not necessary in this record to attempt to unravel the intricate interweavings of the historical situation.

Nevertheless since no translation of this inscription can be satisfactory without the premise of a date, we accept the earlier date of 550 B.C. as being

more in harmony with the statements of the inscription. On the basis of that date we offer the following as a free and tentative translation, subject to any changes that may be required by further data bearing upon the identity of the occupants of the tombs. No two Chinese scholars are altogether agreed on either the historical or textual interpretations of the inscription, so that we take sole responsibility for this translation, but with grateful acknowledgments for the help received from the labours of others.

(1). Chinese Text.

忘 烈 銘 明 于 于 于 敚 侄 于 長 秦 宗 戎 祀 唯
永 武 則 天 晉 韓 楚 寺 平 城 迮 敲 厥 驫 廿
世 文 之 子 公 宗 京 力 陰 先 齊 率 辟 羌 又
毋 圂 于 用 昭 令 賞 嚣 武 會 入 征 韓 作 再

(2). Translation.

"In the 22nd year[1] (of the Chou Emperor) Piao Ch'iang[2] made this bell.[3]

His Chief of Han,[4] Ch'e,[5] led the attack on Ch'in.[6]

Taking the field against Ch'i,[7] he passed through the Great Wall[8] (in the Kingdom of Ch'i), and was first at the meeting at P'ing-yin.[9]

Fierce and unbending was his energy, for he also surprised and captured Ch'u (-ch'iu) and Ching (-tzu).[10]

The bestowal of rewards concerned the Chief of Han; the issuing of commands rested with the Duke of Chin; the citation was (by favour) of the Son of Heaven.[11]

This brilliant example is here recorded, of military prowess and scholarly virtue.[12]

For all time may it never be forgotten."

(3). Exposition.

1. "In the 22nd year." This is the usual manner of referring to the year of the reigning king, and since the "Son of Heaven" is mentioned below, this must refer to a king of the Chou Dynasty.
2. "Piao Ch'iang." The name of the person responsible for the making of the bell. Piao would be the surname, and Ch'iang the personal name.
3. "Bell." The character appears to be *jung* (戎) which means "weapons, to attack in war, the Jung tribes, etc." The context would seem to require that "bell" is meant here, in which case it is possible that *jung* (or *yung*) is borrowed to indicate the *yung* (鏞) (or *jung*) which means "a large bell." This custom of borrowing characters of the same sound to indicate various words was quite usual in pre-Han times.

4. "His Chief of Han." This implies that Piao Ch'iang belonged to the Han Clan. Literally it reads "Han Clan," by which is meant the Chief of the Han Clan. The word translated "Chief" also means "prince" or "sovereign," but we are justified in using "Chief" as being more in keeping with the reading "Han Clan."

This phrase is an almost unanswerable argument for the earlier date, as later on when Han had come into greater prominence and authority it was not spoken of as a clan but as a State or Kingdom, and the Chief of Han had become a Prince of Han.

Han both as a Clan and as a State recognized the over-lordship of the State of Chin (晉). The Han State (韓國) must be distinguished from the great Han Dynasty (漢朝), which existed some centuries later.

5. "Ch'e." This character must here be taken as the name of the Han clan leader.

6. "Led the attack on Ch'in." In the year 559 B.C. the Chin (晉) State headed an alliance of twelve states, for the purpose of attacking Ch'in (秦). The allied army suffered a reverse, and moreover Ch'i, who was originally one of the allies, owing to a dispute with a grandee of the Chin State, broke off from the alliance.

In the attack on Ch'in the Han Clan would be reckoned as a part of the Chin army.

7. "Taking the field against Ch'i." The gap between Ch'i (齊) and the allies had widened, so that in the year 555 B.C. the eleven states under Chin took the field against Ch'i, whose territory was located in the north-west of what is now the province of Shantung.

8. "He passed through the Great Wall." The "Great Wall" here is a section of the defence wall which protected Ch'i on its southern border.

9. "Was first at the meeting at P'ing-yin." P'ing-yin (平陰) was an important city of Ch'i, situated south of the present city of Chi-nan in Shantung, and seems to have been the objective where the various units of the allied army had arranged to meet.

10. "He captured—Ch'u Ching." These two characters together may be read "the Capital of the Ch'u State," which was impossible as the Ch'u capital was hundreds of miles away. Another explanation must be looked for, and this is found in taking each of these characters as referring to two different places in that vicinity. Ch'u-ch'iu (楚丘) is the name of a place in Wei (衞) not far from the borders of Lu (魯), and Ch'i at this time was at war with Lu. Ching-tzu (京茲) was a town of Ch'i southeast of the city of P'ing-yin, and is mentioned in the *Tso Chuan* in connection with this present campaign. It may thus be taken for granted that Ch'u Ching (楚京) are the two places Ch'u-ch'iu and Ching-tzu.

11. "The bestowal of rewards..........the Son of Heaven." These three sentences are in an ascending gradation with a simplicity and beauty in the

Chinese text impossible to translate. The "Chief of Han" recognized his over-lord the "Duke of Chin" but above all was the "Son of Heaven," the Chou Emperor.

It was the usual practice on important occasions for the members of the clan to meet at the Ancestral Temple, and in this case "Han Clan" (韓宗) could just as well mean "Han Ancestral Temple," the thought being that after the victorious campaign the rewards were given out at the Han Temple. Yet the parallelism with the following two sentences would seem to exclude this idea, so the reading "Chief (or Prince) of Han" is followed.

12. "This brilliant example......of military prowess and scholarly virtue. For all time may it never be forgotten."

One character in this first sentence has not yet been deciphered, but this does not affect the line of thought which is quite clear. The characters *wu wen* (武文) have been taken as referring to the earlier Dukes Wu and Wen of the Chin State, but this does violence to the sequence of thought as well as to the textual construction, and it seems more reasonable to take these terms as referring to "military prowess and scholarly virtue" as in the phrase *wu kung wen te* (武功文德).

This inscription confirms certain historical statements recorded in the *"Spring and Autumn Annals" and "Tso's Commentary"* thereon, relating to the inter-state wars and the alignment of the states in their alliances. It also adds to *"Tso's Commentary"* the fact of the leadership of Han under the Chin command, the attack on Ch'in and Ch'i, the breaking through the Great Wall and the meeting at P'ing-yin, the capture of Ch'u-ch'iu and Ching-tzu, and the bestowal of rewards and honours when the campaign had presumably ended, in 550 B.C., when the bells were made to commemorate the prowess of the Chief of Han.

It is interesting to remember that it was during the period of the events of the inscription that Confucius was born, in 551 B.C., not far in a south-easterly direction from the city of P'ing-yin mentioned in the inscription.

B. THE K'ANG SHU VASE INSCRIPTION.

This vase, which is number 253 in the detailed descriptions, is called the K'ang Shu vase because this name is found in the inscription. The inscription is to be considered historical since it states that the vase was made at a certain time, and also mentions two names of individuals, but there are no historical incidents recorded of the nature of those found on the Piao bells, and confirmed by the ancient writings.

There is nothing by which the date may be fixed apart from the style of decoration and script, and the locality and the circumstances of its finding. It gives the date of the 10th year of the reigning king, but there is no inkling in the inscription as to which king.

There seems to be ground for dating it to a period preceding that of the Piao bells, in which case the year date might be that of Ling Wang, which would be 562 B.C., twelve years earlier than the Piao bells.

The vase was evidently not a burial ritual object, but belonged to the "heirloom" group; that is, it was made and inscribed with a view to continuous use at the successive sacrifices. Yet upon the occasion of a ceremonial burial of a prince it would not be thought unseemly for some "heirloom" vessels to be placed in the tomb, but rather be considered as conferring additional honour and respect to the memory of the departed.

It may be simply a coincidence, or it may have some significance, that the first prominent chief of the Han Clan, Han Chüeh (韓厥) or Han Hsien-tzu (韓獻子), retired from his post as principal minister of the State of Chin (晉) in 566 B.C., and died in 563 B.C., that is, the 9th year of Ling Wang, which is just previous to the date of this vase if it is conceded to belong to the reign of Ling Wang.

(1). Chinese Text.

永 孫 年 至 德 叔 我 東二 作 瓜 月 唯
用 之 子 于 祈 承 家 嘼二 鑄 君 吉 十
之 孫 之 萬 無 受 辟 康 貧 厚 日 年
其 子 億 彊 屯 康 樂 壹 子 命 四

(2). Translation.

"On a lucky day in the 4th month of the 10th year (of the king's reign), Hou-tzu, the Prince of Ling-hu[1], made this ritual vase.

Bountifully store up[2] health and happiness for our family, for our Prince K'ang Shu[3] successfully laid up virtue and invoked boundless blessings that continue for myriads of years.[4]

From son to son and grandchild to grandchild[5] this vase shall be handed down for everlasting use."

(3). Exposition.

1. "Hou-tzu, the Prince of Ling-hu."

Considerable difficulty was experienced in deciphering one of the characters of this sentence, and I am under obligation to Mr. Kuo Mo-jo for the interpretation of this clause, which seems to meet all the requirements of the problem.

Mr. Kuo states that *ming-kua* (命瓜) of the inscription is equivalent to *ling-hu* (令狐). Ling-hu (令狐) was a city in Shan-si province, east of the Yellow River, which is now known as I-shih Hsien (猗氏縣). In the period of

the Warring States it belonged to the jurisdiction of Han (韓), which was under the over-lordship of Chin (晉). Doubtless a member of the Han Clan, or a high official, not necessarily of the house of Han, was appointed to rule over Ling-hu, and having died there his body was brought back to old Lo-yang for burial.

This explanation seems to be correct. The high official designated as the Prince or Ruler of Ling-hu might well have been of the house of Wei (衞) which acknowledged K'ang Shu as its founder, while the fact that Ling-hu was under the jurisdiction of Han would reconcile the finding of this vase in surroundings that obviously were connected with a Prince of Han.

In *"Tso's Commentary"* the city of Ling-hu is frequently mentioned in connection with the disputes between Ch'in (秦) and Chin (晉), but not after 576 B.C. when Ch'in suffered a serious defeat, and Chin was henceforth left in possession of that area for a period of years.

It should be noted that Mr. Liu Chieh (劉節) reads 旬 for 瓜, which while limiting the location to I-shih Hsien requires the translation to be "Prince of Hsün" (郇) instead of "Prince of Ling-hu."

2. "Bountifully store up." These two characters (柬嘼) proved difficult to translate. The present day meaning of *chien* (柬) is "a card, memorandum, to select," and that of *shou* (嘼) is "furry animals that bend down the head to eat." These meanings obviously could not fit in with the thought of the sentence. It was found that *chien* (柬) was an old form of another *chien* (簡), meaning "a bamboo writing slip, a memorandum, to appoint, etc." which also had the meaning of "bountiful" as applied to blessings.

The same applied to *shou* (嘼) which was the old form of *ch'u* (畜) meaning "domestic animals, to store up, to accumulate." Both characters in the inscription were followed by the "equal" (二) sign, equivalent to our "ditto," so that the clause would read "bountifully, bountifully, store up, store up," the repetition in the Chinese text having the force of poetic emphasis.

3. "Our Prince K'ang Shu." This Prince lived some 500 years previous to the time of the writing of this inscription, and is mentioned here as being the founder or first head of this particular family.

K'ang Shu (康叔) was the eighth younger brother of Wu Wang, and thus the ninth son of Wen Wang, the founder of the Chou Dynasty.

He was appointed ruler of the State of Wei (衞), and the address at his installation given by Chou Kung (周公) somewhere about 1110 B.C., is recorded in the *"Book of History," Part 5, Book IX (Legge)*, under the title "The Announcement to the Prince of K'ang."

The territory of the State of Wei included K'ai-chou (開州) on the east and Huai-ch'ing (懷慶) on the west, with its centre approximating to Wei-hui (衞輝).

This seems to connect the inscription to the ruling house of Wei, and raises the question of its relationship with the Han Clan, unless we accept the

hypothesis given above, that Hou-tzu was of the family of Wei, holding office under the Han Clan in charge of Ling-hu.

The first prince of Chin was T'ang Shu-yü (唐叔虞), a son of Wu Wang and thus a nephew of K'ang Shu, the first prince of Wei.

In the time of Duke Hsien of Chin (晉獻公), 821-810 B.C., Han Wan (韓萬) was given the territory of Han Yuen (韓原) by which action Han become a clan recognizing the over-lordship of Chin.

The ruling families of both Wei and Chin were of the imperial Chi (姬) surname, as also was Han.

About the end of the 5th century B.C. Wei (衞) lost its independence and became attached to another Wei State (魏國), and Chin about the same time was divided between three new states, Han (韓), Chao (趙) and Wei (魏), the latter being the state that had absorbed the older Wei (衞) State of the K'ang Shu line. These facts point to an earlier attribution than the end of the 5th century B.C. for this inscription.

4. "Myriads of years." The form of this phrase in Chinese is usually *i wan nien* (億萬年), that is 100,000 times 10,000 years, or simply *wan nien* (萬年), 10,000 years, but this gives the unusual form of *wan i nien* (萬億年), or 10,000 times 100,000 years.

5. "From son to son and grandchild to grandchild." Literally the Chinese text reads "until the son of his son, and the grandchild of his grandchild"—a very unusual reading and strikingly poetical in the Chinese.

As mentioned above in connection with the Piao inscription, this translation and exposition must also be considered as tentative, subject to further data bearing upon these finds which may come to light in the future.

Nevertheless one may hazard a guess that the person Piao Ch'iang of the Piao inscription may have been also the governor of Ling-hu, acting in the capacity of an official (家臣) of the Han Clan.

List of Chinese articles dealing with the *Piao* inscriptions:

Hsu Chung-shu (徐中舒): *Piao shih pien chung t'u shih.*
Kuo Mo-jo (郭沫若): *Chin wen ts'ung k'ao. P. 240-251, and supplement.*
Liu Chieh (劉節): *Bulletin of National Library of Peiping.* Vol. 5, No. 6; Vol. 6, No. 1; Vol. 7, No. 1.
Wu Ch'i-ch'ang (吳其昌): *Bulletin of National Library.* Vol. 5, No. 6.
T'ang Lan (唐蘭): *Bulletin of National Library.* Vol. 6, No. 1.
Ku Tzu-kang (顧子剛): *Bulletin of National Library.* Vol. 7, No. 1.

SECTION VI.

BELLS AND STONE CHIMES.

A. Bells.

Upwards of fifty complete bells of the *pien* (編) type have been obtained from these tombs, as well as fragments of others, and they were from thirteen different sets. With one exception they were all decorated with 36 nipples, the exception being a graceful bell, perfectly plain except for the fine decoration on the handle. All of these sets were similar in style, and without question were of the same period, though one set (No. 507) might usually be classed somewhat earlier than the others.

The decorative designs on the bells, with this possible earlier exception, are similar, and are entirely in keeping with those of all the other bronze articles obtained from these tombs.

Only two sets contained inscriptions, one an inscription of sixty-one characters of which sixty have been deciphered, and the other a short inscription of four characters. The bells of these two sets are exactly the same except in the matter of size, the longer inscription being on the larger bells, and the character *Piao* (驫) in both inscriptions provides the common designation for the two sets.

The shorter inscription reads, *Piao Shih Chih Chung* (驫氏之鐘), that is "The Bell of the Piao Clan," or "The Bell of Piao."

The other inscription bristles with difficulties of an historical character, which cannot be fully solved without further confirmation and information as to the persons buried in the tombs. The historical references of this inscription are dealt with elsewhere, suffice it to say that the date of this inscription is taken by the majority of experts to be the 22nd year of the Chou emperor Ling (周靈王), that is 550 B.C.

It is a striking fact that although most of the articles obtained from these tombs might ordinarily be placed on stylistic grounds at a later date than the 6th century B.C., yet the thirteen sets of bells could all without hesitation be attributed to the Eastern Chou period. In fact the inscribed bells, considering

their decorative designs, could more readily be placed at a later period than most of the others, and were it not for the definite date of the inscription most experts in Chinese early bronze would undoubtedly consider them as approximating to the 4th or 3rd century B.C.

Before it was known that other sets of bells were obtained from the tombs the difficulty was met with the theory that the earlier inscribed sets of bells were placed in tombs of a much later date, but this theory cannot be maintained in view of these various sets of bells.

The conclusion seems to be inevitable that we must consider the objects found with the bells as of the same period as the bells themselves, even though this runs counter to previous ideas of the artistic development and productions of the pre-Han period of Chinese art.

These bells provide the strongest evidence for this conclusion, which cannot but be maintained until it can be proved definitely that the dated inscription is not the 22nd year of Ling Wang but the 22nd year of a later Chou king. With further information this may be possible, though it is difficult to see how the historical references of the inscription can possibly be met by a later date.

One further point might be mentioned here. Oftentimes ancient bells have been given a Ch'in or Han attribution because of some stylistic characteristic which we casually speak of as Ch'in, without consideration of the fact that from the time of Ch'in Shih Huang, 221 B.C., there was not only a hiatus in the manufacture of bells but great numbers of bells in current use were melted down or buried. When Shih Huang-ti ordered the books to be destroyed, musical instruments met the same fate, and to such an extent that since then the interpretation of ancient music and the use of ancient instruments have not been clear. As an instance of the scarcity of musical instruments it is on record that in the time of Ch'eng Ti, 32 B.C., a set of stone chimes was found in a pond, and served as a model for new ones thereafter.

It is safe to assume that genuine bells of B.C. times were made before 221 B.C., and that those made during Han times might conceivably differ from these earlier bells owing to lack of ancient models and faulty knowledge. This would not apply later when many of the buried bells had been unearthed, as is seen by many excellent replicas, especially those cast in the Sung Dynasty.

Number 501. Plate CLXVII.

Clapperless bronze bell of the *pien chung* (編鐘) type. The body was of pointed oval section, with straight sides slightly tapering upwards. The lower edge was incurved at both front and back thus forming two sharp points at the bottom. The top was flat with a loop handle of squared top springing from the centre. Both front and back were set with conical bosses of rope-pattern spiral design, in three rows of three on each side of the median panel, making a total of 36 for the whole bell, which is the usual number. These bosses are usually

spoken of as *ju* (乳) or "nipples." In the spaces between these rows of bosses was an ornamentation of spiral design in low relief, and the same sort of ornamentation filled the whole field of the bell below the "nipple" zone, the centre of which was a *t'ao-t'ieh* face. The loop handle was covered with an incised geometrical design, similar to that on many of the objects from these tombs. The middle upright panel on both sides was occupied with an inscription in archaic characters, four in number, meaning "The bell of the Piao Clan."

Nine of these bells were obtained, exactly the same except for the gradation of sizes, which were as follows:

Heights including handles: 4.8″; 5.5″; 5.6″; 6.3″; 6.5″; 7.3″; 8″; 8.3″ and 8.5″.

Number 502ab. Plate CLXVIII and CLXIX.

Bronze bell, similar to the latter in every respect except that the inscription had 61 archaic characters, 32 on the central panel on one side and 29 on the other side.

There were five of these bells, and a fragment of another. The latter unfortunately was not a part that was inscribed, but it was a lengthwise section, and showed the bell originally to have been 11″ in height including handle.

Heights including handles: 8.8″; 9.2″; 9.5″; 9.8″ and 10.2″.

Number 503. Plate CLXXVI.

Bronze bell of the same type as the above. The loop handle was rounded at the top and plain. The bottom zones were filled on both sides, each with a large *t'ao-t'ieh* face design, surrounded with an interwoven composition of straps and spirals decorated with scale patterns, granulations and feather-lines. The same sort of decoration filled the spaces between the nipple zones. The nipples were of the boss type made up in the form of a coiled snake with the full face of the snake in the centre of the nipple top. This design was identical in miniature with that of the standard-top number 053.

There was no inscription, the median upright panel being quite blank. Three of these bells have come to light.

Heights including handles: 8″; 8.3″ and 8.8″.

Number 504. Plate CLXX.

Bronze bell of the same nipple type. The loop handle rounded at the top was quite plain, and smaller than usual. The bottom zone contained only a *t'ao-t'ieh* face in relief, but in the unusual position of having been inverted. The bosses were of granulated spirals, and the spaces between the rows of bosses were occupied by a double-headed snake design in a rectangular key pattern. The central vertical panel was plain. Seven of these bells were found. They were not of good workmanship, and gave the impression that they were intended for burial ritual use only.

Heights including handles: 7.3″; 7.6″; 8″; 8.5″; 9″; 9.5″ and 10.75″.

Number 505. Plate CLXX.

Bronze bell similar to the latter, but without any ornamentation in the bottom zone. The snake-like figure in the spaces between the bosses was not in a key pattern as that of the latter bell, and was in the form of a sinuous dragon. The claw of this dragon was typical of the period, and such as is seen in the jade figure number 314a and in the inlaid figures of the bronze vase number 247. The bosses were of granulated spirals similar to the previous bell, the central upright panel was plain, and the bottom edge was not pointed as the other bells were, but straight. There were two of these bells, which were larger than usual, and the workmanship was poor.

Heights including handles: 11.5″ and 12.5″.

Number 506. Plate CLXXI.

Bronze bell similar to the previous types with pointed bottom edge. The rather square-topped loop handle was quite plain, the bosses were spiral, the spaces between the rows of bosses were filled with a fine line spiral pattern, and the bottom surface was covered with an intricate pattern of incised lines in designs similar to the bronzes of numbers 233 to 236. The vertical central panel was quite blank. There were nine of these bells, and most of them were covered with a charcoal dust which had greatly protected the surface from corrosive action.

Heights including handles: Smallest 5.3″. Largest 10.5″.

Number 507. Plate CLXXII.

Bronze bell of the same shape as the latter, with loop handles, and spiral bosses, but with no median panel and no spaces in zones between the rows of bosses. Instead the whole upper half of the bell was covered with a *t'ao-t'ieh* mask in deeply incised lines and the 18 bosses were applied over the surface of the mask in the usual rows of three. In the lower half a similar incised pattern occupied the centre, in the form of a double bird conventionalized, and the larger bells had also a small bird on the lower right side.

There were three of these bells, all in better condition than most of the others.

Heights including handles: 7.75″, 8.75″ and 9.75″.

Number 508. Plate CLXXIII.

Bronze bell of the same shape as the previous ones but quite plain except for the delicate conventionalized pattern on the loop handle. There were two of this set, and both were of a beautiful light green patination.

a. Height of larger bell including handle 12.25″.
b. Height of smaller bell 6.25″.

Number 509. Plate CLXXIII.

Bronze bell of the same type as the above but more tapered. The loop handle was long and plain, the 36 bosses were of granulated spirals, and the spaces between the bosses were filled with spiral patterns in relief. The central vertical panel was blank, but the lower half of the bell was decorated with a small *t'ao-t'ieh* face in line relief. It had been badly damaged but modern lead restorations have made good the missing parts of this bell.

Height including handle 1′.

Number 510. Plate CLXXIV.

Bronze bell of similar shape. At first there appeared fragments of handles of a bell not previously found, together with a fragment of the side of a bell showing a beautiful spiral pattern in relief. In time a complete bell of this set came to light, though it was in a bad state of repair and the corrosion hid the beauty of the spiral pattern. The central vertical panel was blank, but the small horizontal panels between the nipples were filled with the same spiral design in relief. The handle was decorated with a deep geometrical design and appeared to have been inlaid with a lacquer filling. The nipples were of a spiral rope pattern, and the whole lower half of the bell was covered simply with the spiral relief. Lacquer flakes adhered to the surface of the bronze.

Height including handle 12.6″. Length of fragment 6.25″.

Number 511. Plate CLXXV.

Bronze bell similar to the above, but with handle missing. The central vertical panel, the panels between the rows of nipples, and the lower half of the bell, were filled with designs in relief of intertwined birds and animals. What appeared to be a lacquer filament was spread over an extensive area of one of the faces of the bell. In general shape this bell was more barrel-shaped than usual.

Height 5″.

Number 512. Plate CLXXV.

A similar bronze bell, with patterns in low relief in all the panels and in the lower part of the bell. One face had considerable lacquer flakes adhering to it, and lime was also adherent to the surface both inside and outside the bell.

Height including handle 6.5″.

Number 513. Plate CLXXVI.

One of a group of nine bells. The central panel was blank, but the smaller horizontal panels contain a *k'uei* dragon design in line relief. The lower half contained a conventionalized bird design similar to that of number 507. The handle was of open-work zoomorphic design.

Height including handle 1′7.5″.

Three other bells of this set measure respectively 1′5.5″, 1′4.5″ and 1′2.6″.

The above thirteen types of bells were all of sets called *pien chung* (編鐘), but in addition a few smaller bells of the kinds generally grouped under the name of *toa* (鐸) were also found. Three of these are noted here, of which the first mentioned is without doubt from these tombs, while an element of doubt attaches to the other two, but circumstantial evidence seems to warrant their inclusion in this list.

Number 514. Plate CLXXVII.

A plain bell of oval shape, with a very small loop handle at the top. A clapper was attached to the inside but was unmovable owing to the thick corrosion. The bell both inside and outside was deeply incrusted with corrosion, in which adhered considerable lacquer flakes so typical of the bronze articles obtained from these tombs.

Height over all 4″.

Number 515. Plate CLXXVII.

A slender bronze bell of oval shape with straight bottom and a wing along one side. The handle was a very small loop over an opening at the top of the bell from which a clapper was probably suspended. There was no decoration other than the marking off of panels by a fine beading.

Height over all 6.15″. Width of wing flange .65″.

Number 516. Plate CLXXVII.

A small plain bronze bell with rectangular socket at the top in which had been inserted a wooden handle.

Total height 3″.

B. Stone Chimes.

The ancient writings included among burial objects not only sets of sixteen *pien* bells, but also sets of sixteen *pien* sonorous stones (編磬). With this in mind it was considered surprising that although many bells were obtained from the tombs no sonorous stones had appeared. After many inquiries it was learnt that there had been fragments of flat stones which were thought to be of no value and had been thrown aside. Some were used as a coping to a compound wall. The fragments having been arc-shaped were thought to have been sections of a circular well-mouth, or of a stone facing of the arch over the tomb door. However in time some of these were obtained and they proved to be from sets of stone chimes. Altogether eighteen complete stones were obtained, some of them broken across, and as many more fragments of others. There was not a complete set among them, but they appeared to be from at least six different sets, the smallest complete stone being eight inches long and the largest twenty inches. They were made of white and grey marble and of ordinary grey limestone. Although they all had the usual obtuse-angle at the top edge, the

under edge was not angular but arc-shaped, with the exception of two which were perfectly straight on the lower edge. All had holes bored in the angles for suspension purposes, and two had two holes, while another fragment had a half of a hole cut on the upper margin which seemed to point to the fact that it had been cut down from a larger stone. The proportions of these chimes do not follow the scale of proportions given in the *K'ao kung chi* (考工記). Moreover the method of re-toning the chimes as given in the *K'ao kung chi* does not seem to have been followed altogether. According to the *K'ao kung chi* if the note was too high the lower *edge* of the longer arm was to be ground, while if the note was too low the *end* of the longer arm was to be ground. As will be seen in the illustrations the *surfaces* of the chimes, both on the upper and lower areas were ground out. (See Nos. 523, 524 and 527). It is probable that the writer of the *K'ao kung chi* recorded either one particular set of chimes which he had before him, or the proportions that were the standard for a particular locality.

One object of the greatest interest found with these stones was an elliptical-shaped convex-surfaced stone which in all probability was a chime knocker. The shape was such that it could readily be held in the hand, and the flattened edge was absolutely correct for giving the best sound results. A wooden knocker on the chime gave a flat sound, a metal knocker usually resulted in a metalic sound, but this stone knocker gave a true ring with a mellow cadence.

The *pien* stone chimes apparently have always been the complement of the *pien* bronze bells. As the bells have been used in the Confucian services up to recent years, so the chimes were also used in those services, the set of sixteen being hung on a stand to the west of the terrace in correspondence with the set of sixteen bells which hung on a stand to the east of the terrace. As with the bells the ancient chimes were graded from small to large, while since Sung times, or at any rate from early Ming, sets of both bells and chimes were all of the same size and graded in pitch by the thickness of the material.

The Reverend A. C. Moule in Vol. XXXIX of the *Journal of the N.C.B.R.A.S.* gives diagrams of modern stone chimes and of an ancient type recorded in the *Lü lü ching i* (律呂精義). It is striking that the general form of the modern stones should be that of the stones from these tombs, except that the latter are all arcshaped or straight on the lower edge, while the modern stones are all obtuse-angled. It is also noteworthy that the arcs of some of these stones seem to be units of an even number of segments forming the complete circle of their particular arc. Only one half of the chimes obtained are detailed below, beginning with number 520.

Number 520. Plate CLXXVIII.

Sonorous stone of a chime set. Of ivory-white marble, somewhat calcified, polished on both sides and edges. The inner edge was an arc of a circle 3′7″ in diameter. The outer edge was in two parts, each part slightly concave, with

an obtuse angle between the two. Below the angle was bored a hole for suspension purposes .8" in diameter on one side and .7" on the other side, having been bored from one side only. From this suspension point one part or arm of the stone was short and thick and wide, the other part being longer, thinner and narrower. The two end edges were slightly convex, that of the wider end being at right angles to the alignment of the lengthwise edges, and that of the narrow end almost so. The musical note of the stone was "A" of the second treble octave. Green bronze corrosion and lacquer flakes adhered to the surfaces in small quantity. Eight of the arcs completed a circle.

Length of inner arc 1'3". Outer edge, long arm 11.75"; short arm 6.75".
Width: across centre 5.5"; at short end 4.15"; at long end 3.5".
Thickness: at short end 1.25"; at long end .75".

Number 521. Plate CLXXVIII.

Sonorous stone of a chime set. Of fine grey limestone slightly marbled, and polished except on one surface. The inner edge was an arc of a circle 3' in diameter. The outer edge was in two parts, each part slightly convex with the angle point between the two. Below this point was bored a hole for suspension .75" in diameter on one side, receding to .5" on the other or under side, which was the unpolished surface. From this suspension point one part of the stone was narrower and longer and the other wider and shorter, as well as thicker, as in the case of the stone described above. The two end edges were slightly convex, but instead of being at right angles with the lengthwise edges as in the above stone, they turned in so that the corners at the arc edge formed obtuse angles of about 120°. Obviously the shape of this stone was so different from the above that it undoubtedly belonged to a second set. The musical note of this stone was "C" of the third treble octave. Twelve of the inner arcs formed a complete circle.

Length of inner arc 8". Outer edge: long arm 6.75"; short arm 4.5".
Width: across centre 3.5"; at short end 3"; at long end 2.5".
Thickness: at short end .8"; at long end .7".

Number 522. Plate CLXXIX.

Stone chime of ivory-white marble, probably of the same set as number 520. The note was "F" of the third treble octave.

Length of inner arc 10.5". Outer edge: long arm 8.5"; short arm .5".
Width: across centre 4.4"; short end 3.25"; long end 3".
Thickness average 1". Diameter of circle 2'7".

Number 523. Plate CLXXIX.

Stone chime of soft grey limestone. The surface had been ground for re-toning on both sides. The note was "F" of the third treble octave.

Length of inner arc 1'2.75". Diameter of arc circle 4'.
Width: across centre 6"; short end 5.25"; long end 3.75".
Length: long arm outer edge 12.5"; short arm outer edge 9".
Thickness average .85".

Number 524. Plate CLXXIX.

Fragment of soft grey limestone chime. The surfaces had been ground out on both sides for re-toning. The note was "C" of the third treble octave, but this may not have been the original note when the stone was complete.

Length of fragment 1'3". Thickness 1" but at points ground down to .5".

Number 525. Plate CLXXIX.

Fragment of hard black marble chime, with two holes bored at the top. The note was "C" of the third treble octave.

Length 1'. Thickness 1".

Number 526. Plate CLXXIX.

Fragment of small limestone chime. Note "F" of fourth treble octave.

Length 4.5". Width 3". Thickness .75".

Number 527. Plate CLXXIX.

Grey limestone chime, ground down for re-toning. The note was "G" of the second treble octave.

Length of arc 1'2.75". Diameter of arc circle 2'10".
Outer edge: long arm 10"; short arm 8".
Outer end: long arm 5"; short arm 5.85".
Thickness average 1" but ground down to .6" at edge.

Number 528. Plate CLXXX.

Light grey limestone chime. The note was "D" of the second treble octave.

Length of arc 1'2". Diameter of arc circle 3'10".
Outer edge: long arm 10.75"; short arm 6.25".
Outer end: long arm 3.25"; short arm 3.85".
Thickness average 1.3".

Number 529. Plate CLXXX.

Light grey marble chime, with edges slightly chamfered. The note was "C" of the third treble octave, but this cannot be relied upon as the stone had been broken across.

Length of arc 1'5.25". Diameter of arc circle 4'.
Outer edge: long arm 1'1"; short arm 8.25".
Outer end: long arm 3.25"; short arm 4".
Thickness average 1.25".

Number 530. Plate CLXXX.

A grey limestone object of elliptical shape with convex surfaces, and with a straight border nearly half an inch wide around the edge.

Length 5.15". Width 2.75". Thickness at centre 1.15".
Width at edge .4".

Number 531. Plate CLXXXI.

Soft limestone chime, with straight lower edge. The note was "C" of the fourth treble octave.

Length of lower edge 9.5".
Outer edge: long arm 7.4"; short arm 4.75".
Outer end: long arm 3"; short arm 3.5".
Thickness average 1.15".

Number 532. Plate CLXXXI.

Soft limestone chime similar to the latter and probably from the same set.

Length of lower edge 8.5".
Outer edge: long arm 6.25"; short arm 4.15".
Outer end: long arm 3"; short arm 2.5".
Thickness average 1.1".

Number 533. Plate CLXXXI.

Light grey soft limestone chime. The note was "F" of the second treble octave. Bronze corrosion adhered to the surfaces.

Length of lower edge 9". Diameter of arc circle 2'6".
Outer edge: long arm 7"; short arm 4.75".
Outer end: long arm 2.5"; short arm 3.5".
Average thickness .75".

Number 534. Plate CLXXXII.

Dark grey limestone chime, badly decomposed on the surfaces and having been broken across at two points. There were two holes for suspension. The note was "F" of the third treble octave, but owing to the fractures this is not reliable.

Length of lower arc 7.75". Diameter of arc circle 2'.
Outer edge: long arm, allowing for broken corner 8.5"; short arm 4.75".
Outer end: long arm 3.6"; short arm 3.75".
Thickness average .75".

Number 535. Plate CLXXXII.

Short grey limestone chime. The note was "G" of the third treble octave.

Length of lower arc 6.25". Diameter of arc circle 1'2".
Outer edge: long arm 5.5"; short arm 3.75".
Outer end: long arm 3.25"; short arm 3.75".
Thickness average .85".

Number 536. Plate CLXXXII.

Grey limestone chime, which had apparently been made over from a larger one, the remains of the hole of the latter being seen in the margin of this one.

The note was "D" of the third treble octave, but this is not reliable for the chime had been broken across. Since the chime had been made over the arc was imperfect.

Length of arc 9.25".
Outer edge: long arm 7.4"; short arm 4.5".
Outer end: long arm 3.5"; short arm 3.75".
Thickness average .85".

Number 537. Plate CLXXXII.

Whitish marble chime with slightly chamfered corners. This was somewhat similar to number 529 and was probably from the same set. The note was "A" of the second treble octave.

Length of arc 9.5". Diameter of arc circle 2'1".
Outer edge: long arm 7"; short arm 5".
Outer end: long arm 3"; short arm 3.25".
Thickness average .85".

3. Article No. 253. Plate CLXXXIV.

An inscription of 47 characters incised around the neck of a large bronze vase. This vase was one of a pair, the inscriptions of which were identical. This inscription also is dealt with in chapter 7 of the text.

4ab. Articles No. 022ab. Plate CLXXXV.

Inscriptions incised on the templates of a pair of bronze hinged objects.

5ab. Articles No. 055ab. Plate CLXXXV.

Inscriptions incised on a pair of "zed" shaped objects.' They were mostly numerals probably designating the order of setting up the framework to which these belonged. The mark on the left of 5a is probably the artisan's personal mark.

6abcde. Articles No. 249-250. Plate CLXXXVI.

Inscriptions incised on the base rim of several of the square-shaped bronze vases. The inscriptions are very much the same, stating the capacity of the vessels, and their placing. The vessels having the first four inscriptions were for "right" (右) placing, the lowest inscription (6e) was for "left" (左) placing.

7. Article No. 295. Plate CLXXXVII.

An inscription incised in very small characters on the bottom of a small silver box. This inscription is not complete and the last few characters are mutilated owing to the damaged condition of the object.

8ab. Article No. 232b. Plate CLXXXVII.

(*a*) An inscription of two characters incised on the cover of a small tripod, and also on the top of one of its handles. The other handle had the figure "two" incised on it.

(*b*) An inscription of one character incised on the rim of the cover of a pair similar to the latter.

9. Article No. 232a. Plate CLXXXVII.

An inscription of ten characters incised on the body of a bronze tripod, designating capacity and "left" placing. There were other tripods of this set with similar inscriptions, including that for a "right" placing.

10. Article No. 083. Plate CLXXXVII.

A mark or character incised on the surface of one of a set of hinged corner sockets, probably of a chariot.

SECTION VII.

CHINESE INSCRIPTIONS.

The script on the various bronzes from these tombs is all in the style that is usually considered to be of the period of the Warring States, sometimes called Contending States, or Fighting States (戰國), that is, from about 480 B.C.

It is quite probable that this style of script was used even before 480 B.C., and that it continued to the end of the third century, that is, to the beginning of the Western Han dynasty, 206 B.C.

As far as is known there are only three inscriptions that may be considered as historical, that is, numbers 501, 502 and 253 listed below, and these are dealt with in another chapter.

The other inscriptions are of ritual significance, dealing with capacity and placing, or are artisan's numbers and marks as seen on certain chariot fittings.

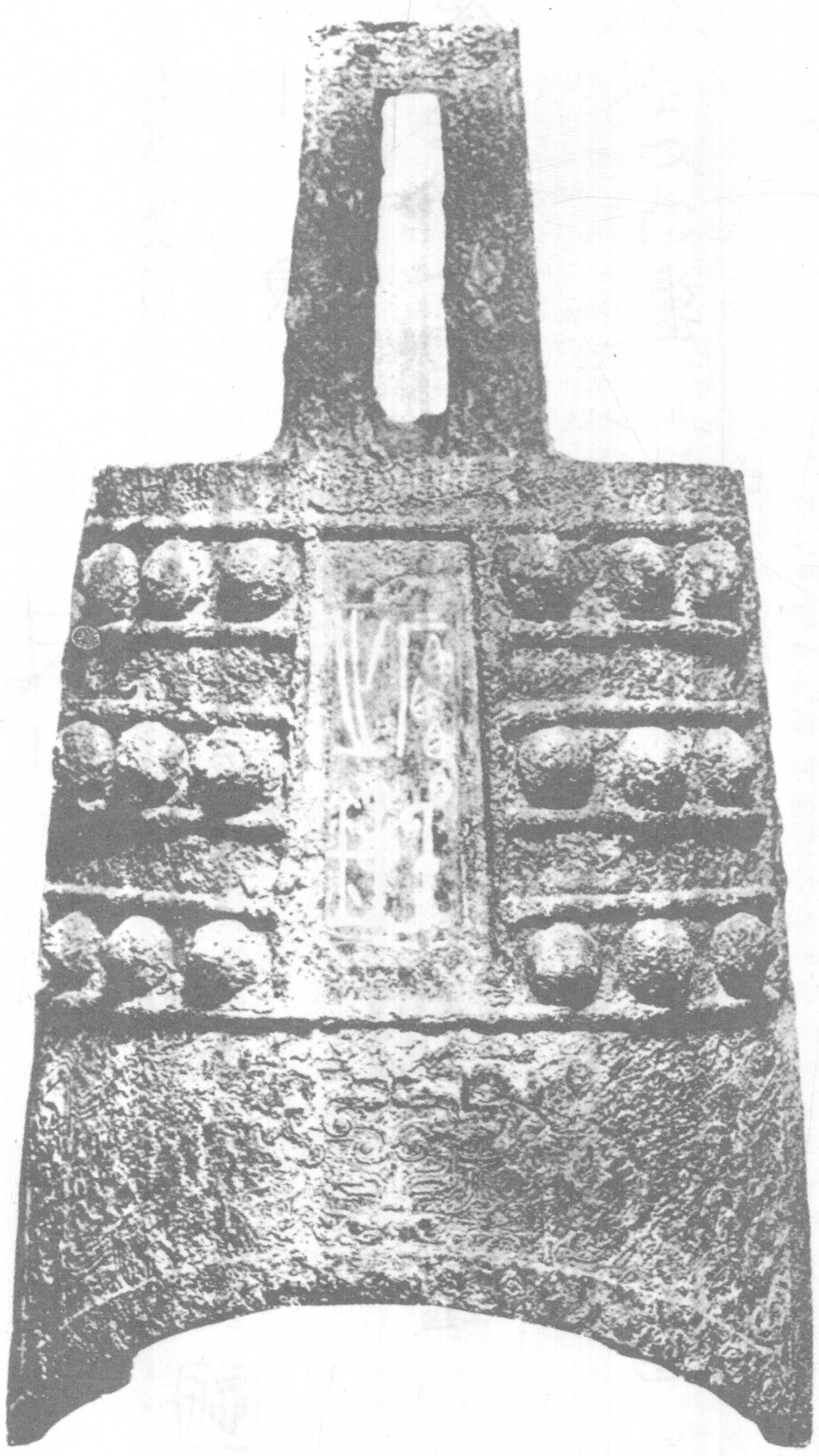
Since many of these characters have not yet been deciphered, no attempt will be made to transcribe them into modern Chinese or to translate them, but only the number and style of the object upon which these inscriptions are found will be given in the list below, numbering them from 1 to 14 to correspond with the numbers of the illustrations of the facsimile inscriptions given on Plates CLXXXIII to CLXXXVII.

1. Article No. 501. (See Plate CLXVII).

An inscription of four characters found on one of the sets of Piao bells, and reading *Piao shih chih chung*, which means "The bells of the Piao Clan." The original inscription is seen in the illustration of the bell, Plate CLXVII.

2. Article No. 502. Plate CLXXXIII.

An inscription of 61 characters found on the bells of the second Piao set. This inscription is dealt with in chapter 7 of the text, in "The Historical Inscriptions and their Significance."



501. Clapperless Bronze Bell with Piao Inscription.

11. Article No. 243. Plate CLXXXVII.

An inscription of two characters incised on the rim of a large shallow pan. Owing to the object being a fragment the first character is not complete. The second character is *chün* (君), the word for "Prince."

12. Article No. 113. Plate CLXXXVII.

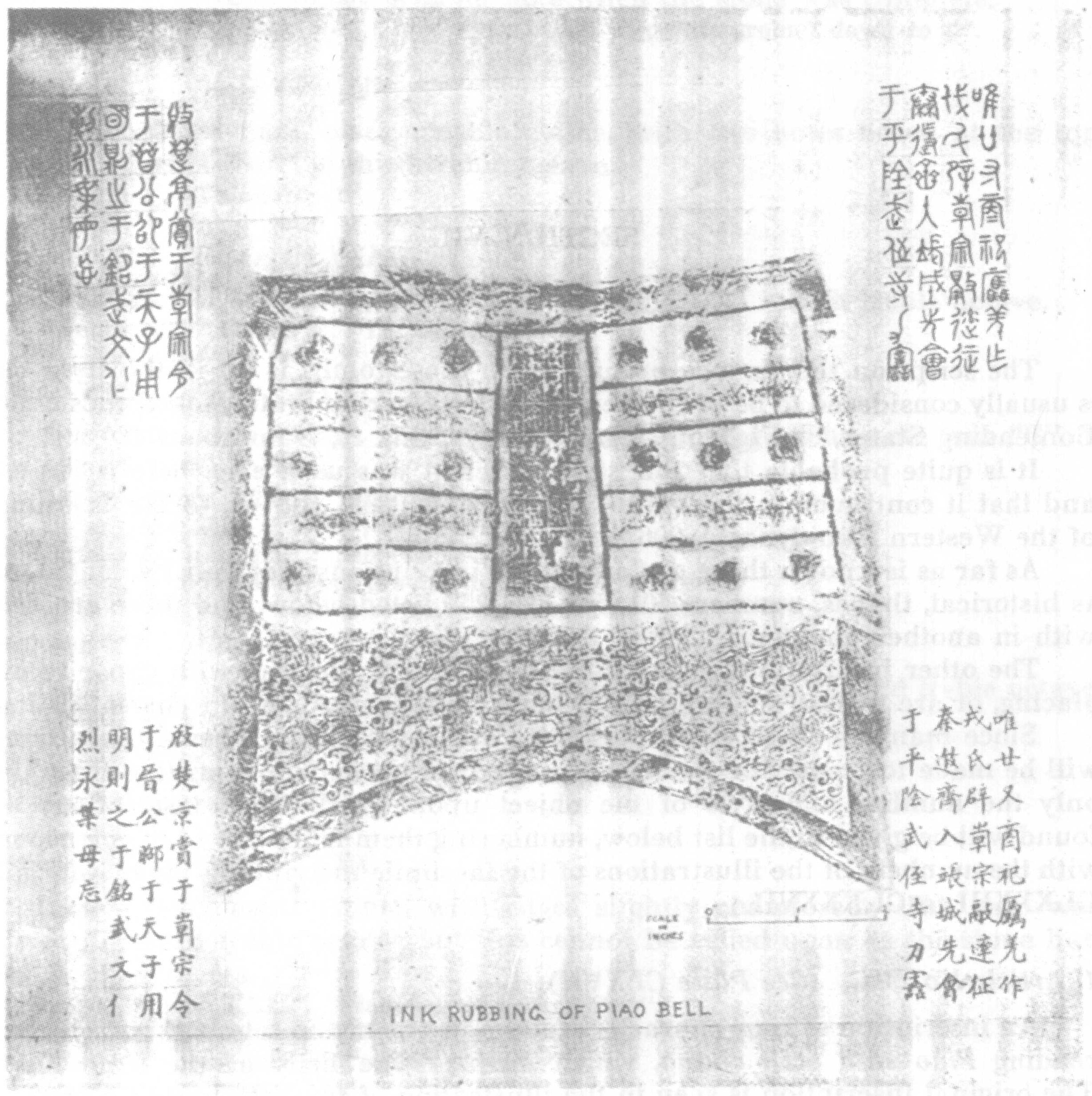
An inscription of three characters incised on the pedestal and on the bowl of a bronze pedestal lamp.

13. Article No. 109. Plate CLXXXVII.

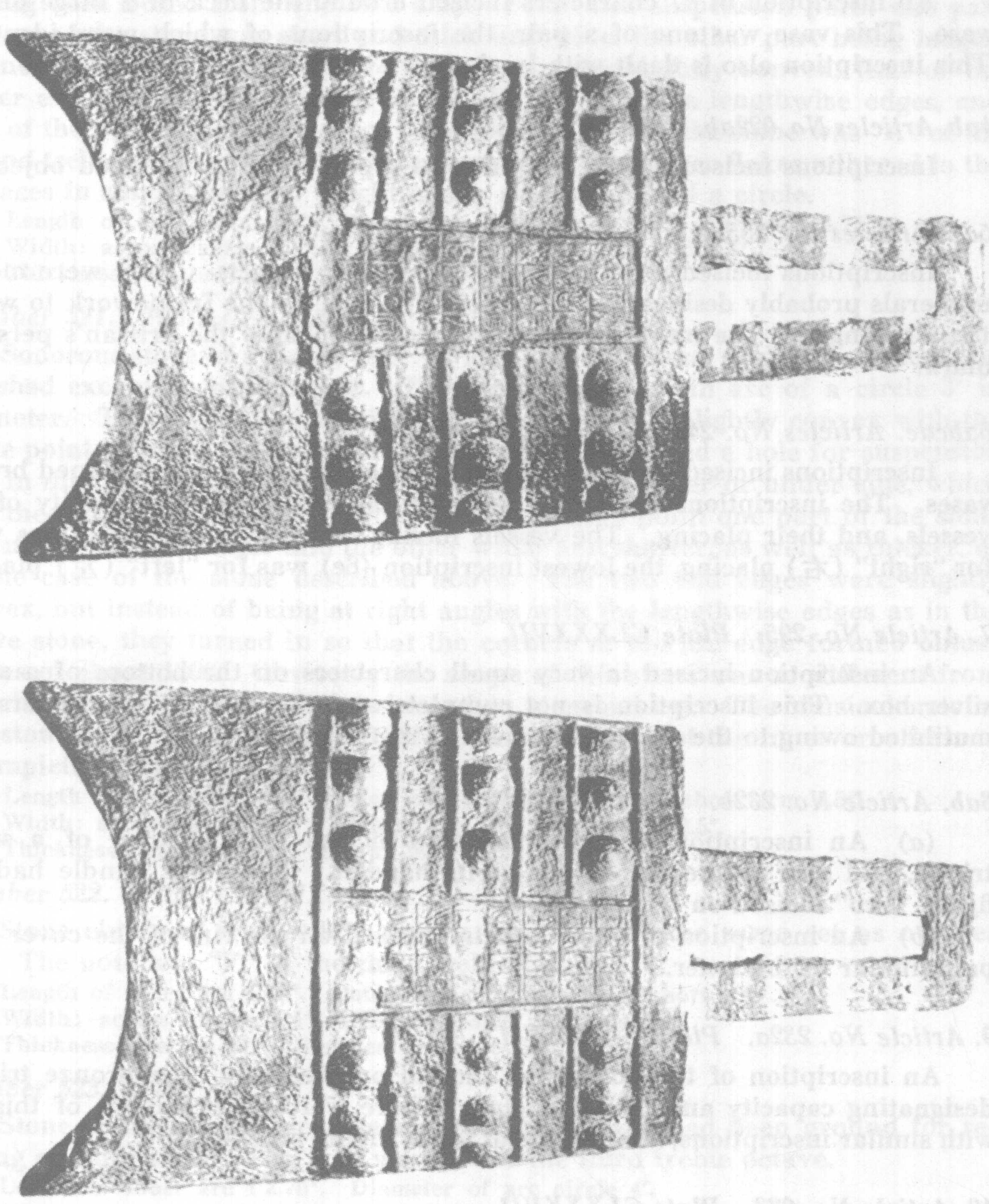
An inscription of two characters incised on the pedestal of a bronze lamp. These two characters have been generally accepted by experts as being *Han Chün* (韓君) which mean "Prince of Han."

14. Article No. 187. Plate CLXXXVII.

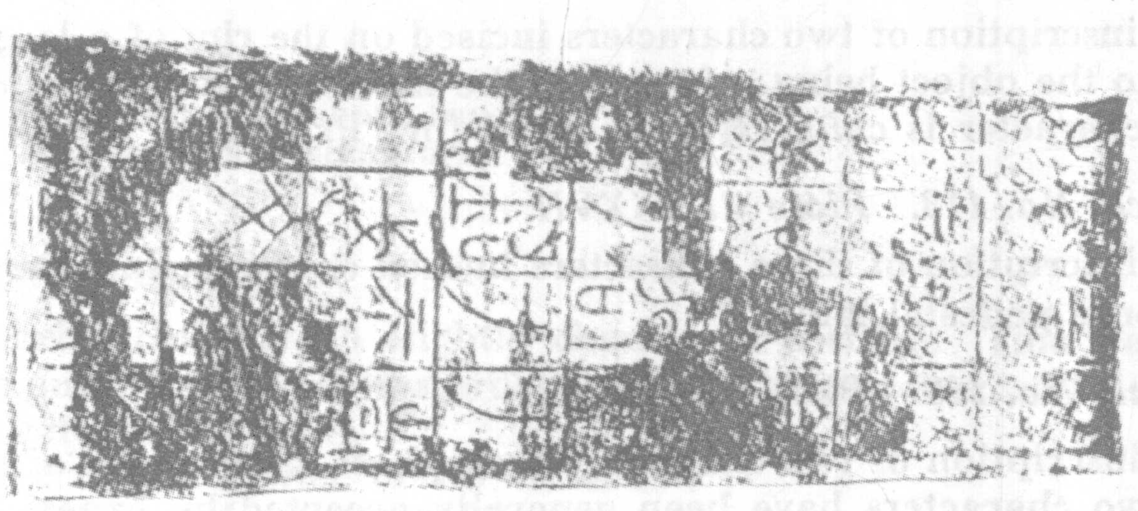
Transcription of impressions of some of the seals. Only a few of these have been deciphered.



502. Ink Rubbing of Piao Bell.



502. Two sides of the Piao Bell



驫羌鐘

唯廿又再祀驫羌作
戎氒辟韓宗敓逨征
秦迮齊入長城先會
于平陰武侄寺力譶
敓楚京賞于韓宗令
于晉公昭于天子用
明則之于銘武文□
烈永世毋忘



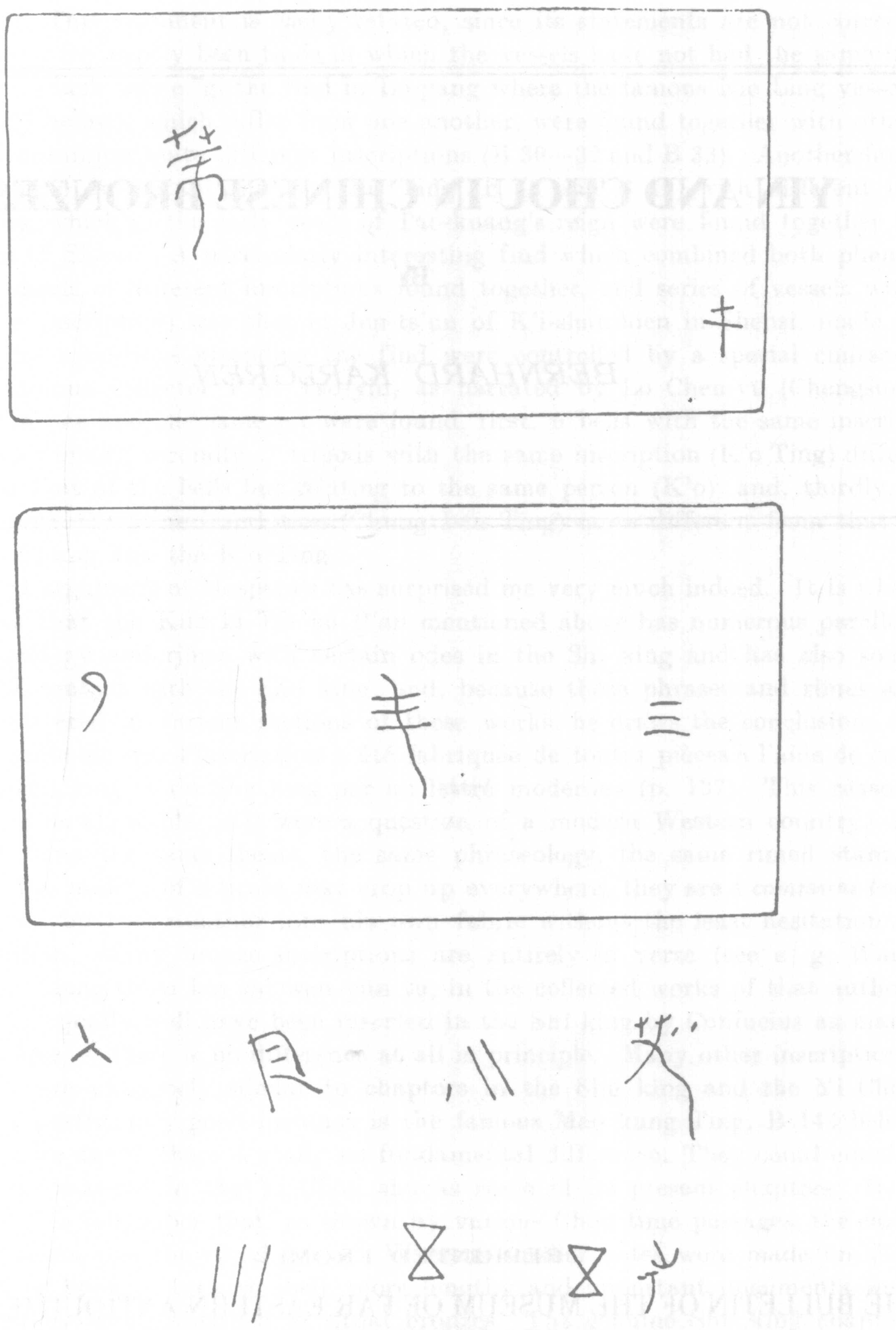
2. The Inscription from Piao Bell, number 502.

(Note: Inscription No. 1 is found on the Piao Bell of Plate CLXVII).

GROUP 7.

Chinese Inscriptions.

Plates CLXXXIII—CLXXXVII.



4a

4b

5a

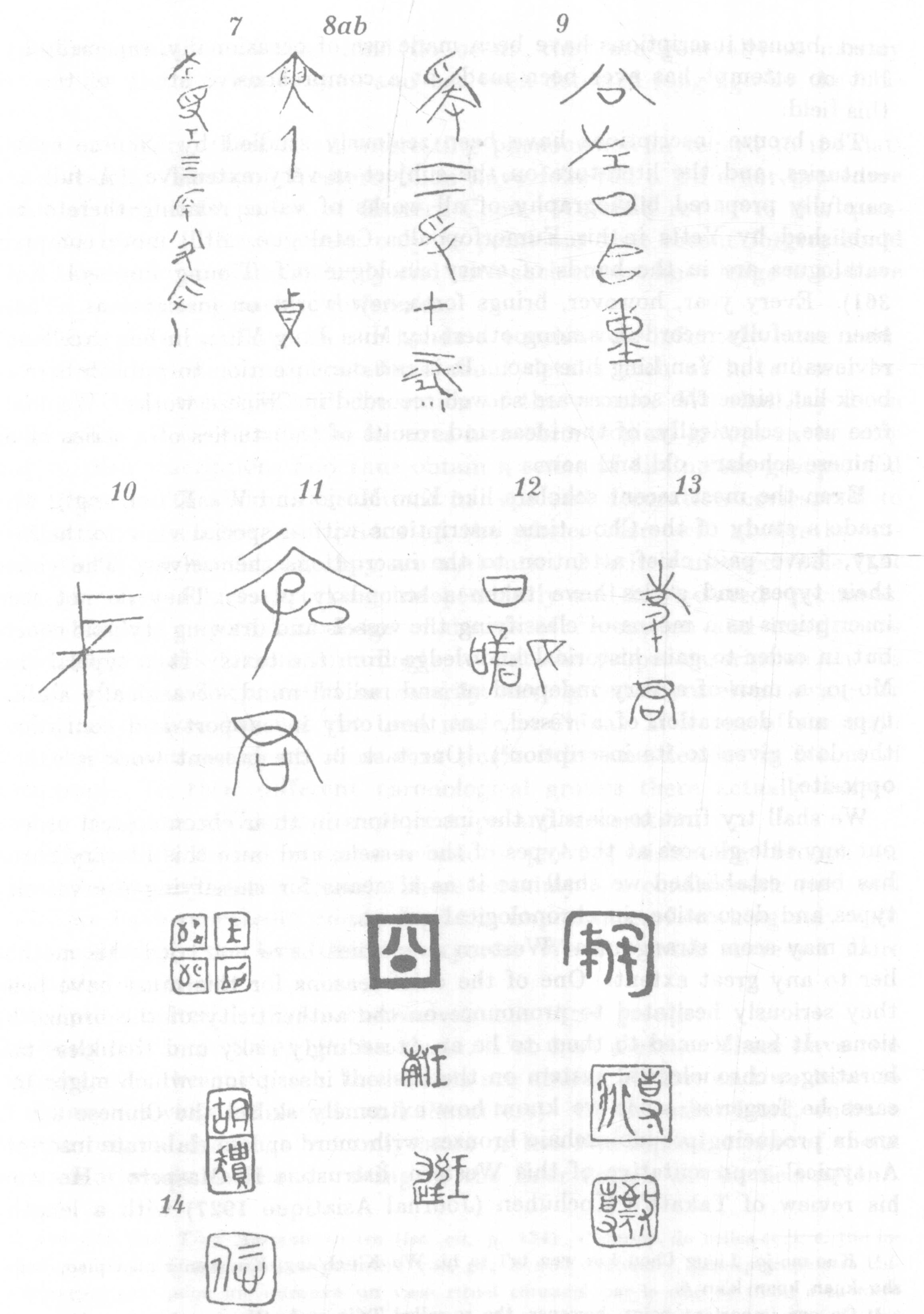
5b

4ab. Inscriptions from articles number 022ab. *5ab.* Inscriptions from articles number 055ab.



永孫年至德盩戎東作□月隹
用之子于祈承家嘼鑄君吉十
之孫之萬無受辟康尊厚日年
其子億盨乜康樂壺子命四

3. The Inscription from article number 253.



7. Inscription from article number 259. *8ab.* Inscription from article number 232b. *9.* Inscription from article number 232a. *10.* Inscription from article number 083. *11.* Inscription from article number 243. *12.* Inscription from article number 113. *13.* Inscription from article number 109. *14.* Inscriptions from seals number 187.

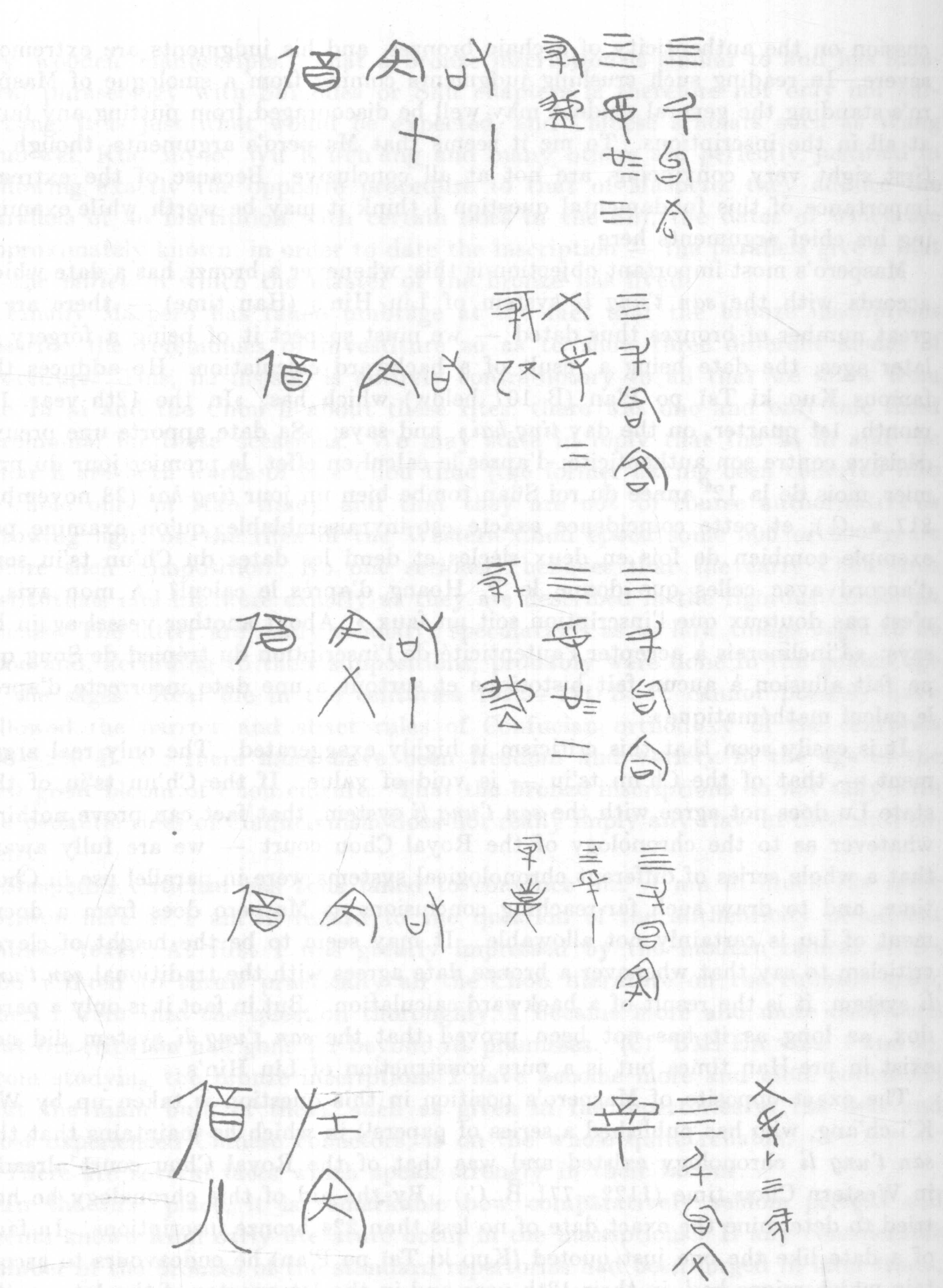
6a

6b

6c

6d

6e



6abcde. Inscriptions from articles numbers 249-250, and similar vessels.

YIN AND CHOU IN CHINESE BRONZES

BY

BERNHARD KARLGREN

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YIN AND CHOU IN CHINESE BRONZES

BY

BERNHARD KARLGREN

The present article has grown out of discussions carried on for many years between Professor J. G. Andersson and myself. Throughout the preparation of the paper he has given me invaluable help and advice. The article has been written in collaboration with Miss Birgit Åkerdahl, assistant at the Museum of Far Eastern Antiquities. Museum officials and private collectors in various countries have very kindly facilitated the researches, among others, His Royal Highness the Crown Prince of Sweden, Mr. Anders Hellström, Professor O. Kümmel, Dr. Reidemeister, Herr H. G. Oeder, Herr H. Hardt, Mrs. Margot Holmes, Mrs. M. Sedgwick, Professor C. G. Seligman, Professor W. P. Yetts, Mr. J. Sparks, Mr. Thorbe.

In the Bulletin of the Museum of Far Eastern Antiquities a summary has been published of the principles on which an exhibition of bronzes was organized in the Museum in 1933: a classification and a sketch of a chronology of Archaic Chinese bronzes.[1])

This article was of an entirely preliminary nature and was intended to be a point of departure for a more detailed investigation. The present paper is to be regarded as a first contribution of this kind. On many points it has been possible to confirm and support the theories advanced in the preliminary article. On other points a revision has had to be made, as is but natural, since here philological data have been made use of which were not available to the authors of the preliminary article.

One of the fundamental novelties of that sketch was the conclusions there drawn from the now famous Piao bells and their inscription. This fact raised the question: how far can the bronze inscriptions aid in establishing a real chronology of archaic Chinese bronzes? We attempt here a contribution to the answer to that question. It should be emphasized that also the present paper is no more than a sketch. We have limited our investigations so far to certain fundamental features, and a great number of questions of detail in regard both to the inscriptions and to the vessels have to be left to future research. We hope to revert very soon to these various problems and to publish new studies which are to form sequels to the present one.

In the West the Chinese bronze inscriptions have been very little utilized for the purpose of determining the age of the bronzes and their stylistic system. Isolated bronze inscriptions have been made use of occasionally, especially by Yetts, but no attempt has ever been made at a comprehensive study of the whole of this field.

[1]) The Exhibition of Early Chinese Bronzes arranged on the occasion of the 13th International Congress of the History of Art, Stockholm September 1933, BMFEA No. 6, 1934.

The bronze inscriptions have been zealously studied by Chinese scholars for centuries, and the literature on the subject is very extensive. A full and very carefully prepared bibliography of all works of value relating thereto has been published by Yetts in his Eumorfopoulos Catalogue. Still more comprehensive catalogues are in the hands of every sinologue (Cf. T'oung Pao vol. XXVII p. 361). Every year, however, brings forth new works on inscriptions. These have been carefully recorded, among others by Miss Jung Yüan in her excellent yearly reviews in the Yen king hüe pao. It is not our intention to publish here a bulky book-list, since the sources are so well recorded in Chinese works. We shall make free use, eclectically, of the ideas and results of the studies of a series of brilliant Chinese scholars, old and new.

Even the most recent scholars like Kuo Mo-jo and Wu K'i-ch'ang[1]), who have made a study of the Chou time inscriptions with a special view to their chronology, have paid chief attention to the inscriptions themselves. The vessels and their types and styles have taken a secondary place. They do not study the inscriptions as a means of classifying the vessels and drawing stylistic conclusions, but in order to gain historical knowledge from the texts. It is typical that Kuo Mo-jo, a man of a very independent and radical mind, occasionally adduces the type and decoration of a vessel, but then only in support and confirmation of the date given to its inscription[2]). Our task in the present work is exactly the opposite.

We shall try first to classify the inscriptions in their chronological order, without any side-glances at the types of the vessels; and once this literary chronology has been established we shall use it as a means for classifying the vessels, their types and decoration, in chronological groups.

It may seem strange that Western sinologues have not tried this method earlier to any great extent. One of the chief reasons for this must have been that they seriously hesitated to pronounce on the authenticity of the bronze inscriptions. It has seemed to them to be an exceedingly risky and thankless task elaborating a chronological system on the basis of inscriptions which might in many cases be forgeries, since we know how extremely skilful the Chinese art forgers are in producing pseudo-archaic bronzes with more or less elaborate inscriptions.[3]) A typical representative of this Western distrust is H. Maspero. He winds up his review of Takata's Kochühen (Journal Asiatique 1927) with a lengthy discussion on the authenticity of archaic bronzes, and his judgments are extremely severe. In reading such crushing judgments coming from a sinologue of Maspero's standing the general student may well be discouraged from putting any faith at all in the inscriptions. To me it seems that Maspero's arguments, though at first sight very convincing, are not at all conclusive. Because of the extreme importance of this fundamental question I think it may be worth while examining his chief arguments here.

[1]) Kuo-mo-jo, Liang Chou kin wen ts'ï ta hi; Wu K'i-ch'ang, Kin wen i nien piao, Peip'ing t'u shu kuan kuan k'an 6.

[2]) On one important point, however, the so-called Ts'in style (Huai style), he makes use of the inscriptions in order to advocate its early appearance.

[3]) Cf. Shang Ch'eng-tso, Ku tai i k'i wei tsï yen kiu, Kin ling hüe pao vol. 3.

Maspero's most important objection is this: whenever a bronze has a date which accords with the *san t'ung li* system of Liu Hin's (Han time) — there are a great number of bronzes thus dated — we must suspect it of being a forgery of later ages, the date being a result of a backward calculation. He adduces the famous Kuo ki Tsï po P'an (B 107 below) which has: »In the 12th year, 1st month, 1st quarter, on the day *ting-hai*», and says: »Sa date apporte une preuve décisive contre son authenticité; d'après le calcul en effet, le premier jour du premier mois de la 12e année du roi Süan tombe bien un jour *ting-hai* (28 novembre 817 a. C.); et cette coincidence exacte est invraisemblable: qu'on examine par exemple combien de fois en deux siècles et demi les dates du Ch'un ts'iu sont d'accord avec celles que donne le P. Hoang d'après le calcul? A mon avis il n'est pas douteux que l'inscription soit un faux.» About another vessel again he says: »J'inclinerais à accepter l'autenticité de l'inscription du trépied de Song qui ne fait allusion à aucun fait historique et surtout a une date incorrecte d'après le calcul mathématique».

It is easily seen that this criticism is highly exaggerated. The only real argument — that of the Ch'un ts'iu — is void of value. If the Ch'un ts'iu of the state Lu does not agree with the *san t'ung li* system, that fact can prove nothing whatever as to the chronology of the Royal Chou court — we are fully aware that a whole series of different chronological systems were in parallel use in Chou time, and to draw such far-reaching conclusions as Maspero does from a document of Lu is certainly not allowable. It may seem to be the height of clever criticism to say that whenever a bronze date agrees with the traditional *san t'ung li* system, it is the result of a backward calculation. But in fact it is only a paradox, as long as it has not been proved that the *san t'ung li* system did not exist in pre-Han times but is a pure construction of Liu Hin's.

The exact opposite of Maspero's position in this question is taken up by Wu K'i-ch'ang, who has published a series of papers[1]) in which he maintains that the *san t'ung li* chronology existed and was that of the Royal Chou court already in Western Chou time (1122—771 B. C.). By the aid of this chronology he has tried to determine the exact date of no less than 224 bronze inscriptions. In face of a date like the one just quoted (Kuo ki Tsï po P'an) he endeavours to ascertain which reigns had, in their 12th year and in the 1st quarter of the 1st month,

[1]) Yin Chou chi tsi nien li t'uei cheng, in the Yen king hüe lun ts'ung of the Ts'ing Hua University, vol. 2; Kin wen li shuo su cheng, in the Yen king hüe pao vol. 6.

a day *ting-hai* according to the *san t'ung li* system, and he thinks he has found acceptable dates throughout. Now this method is to our mind at any rate preferable to the paradox of Maspero's, which is based on a mere axiom. Wu's theories are at least founded on a painstaking and detailed examination of scores of examples. And yet we dare not accept his results either, in a general way. There is, after all, a fatal point of uncertainly: if we possessed the details of various other chronological systems known to have existed in the Chou era, they might turn out to give different solutions yet quite as satisfactory as the *san t'ung li*. Indeed we know too little of the Western Chou epoch to venture to accept such detailed results. Even as regards the reigns and their number of years, our meagre sources of information, which are many centuries later than Western Chou, are not reconcilable (cf. e. g. Kung-wang's reign, p. 27 below). How can we presume, then, to build up a whole system of bronze chronology on the basis of such astronomical data as the occurrence, according to the *san t'ung li*, of a day *ting-hai* in such and such a month of such and such a reign? In my opinion it is far too bold. After all, we cannot even know whether there was only *one* system in use in Royal Chou during the long period 1122—771. One system may have obtained during a certain reign, been discarded in a following and reintroduced in a third. Or two or more systems may have been in use at the same time, favoured by competing groups of scribes — we can know nothing whatever of this. Our position in regard to the dates of the bronzes is therefore entirely negative. We can never regard an astronomical fact of a Western Chou inscription as a safe instrument for dating; if it tallies well with the traditional reign list and the *san t'ung li*, it is none the less of no value, since another possible reign list now lost and another chronological system now unknown might have given a different result. But we shall be no less disinclined to take such an astronomical fact as an argument against an inscription. It is quite possible that in this particular case the reign list may happen to be correct and the scribe in question may have been an adherent of the *san t'ung li*. To our mind there is no other attitude possible, in regard to Western Chou dates, for which the sources are so few and meagre and of a so much later age, than that of pure agnosticism.

Another point which has thoroughly roused Maspero's suspicions is the fact that there are numerous cases in which the same inscription occurs on several or even a whole series of vessels. He writes (p. 154): »Evidemment il n'y a rien d'impossible à ce qu'on soit tombé parfois sur la cachette où dans l'antiquité une famille avait caché ses vases rituels; mais par quel hasard n'a-t-on jamais fait que des trouvailles où tous les vases portaient la même inscription? . . . Et cette profusion de vases identiques est d'autant plus étrange que les anciens chinois ne paraissent pas avoir volontiers prodigué le métal. . . Quand plusieurs vases portent la même inscription, il est vraisemblable que l'un au moins d'entre eux est un faux, une copie ou une imitation sur laquelle on a reporté l'inscription

du vrai.» This argument is easily refuted, since its statements are not correct. There have frequently been finds in which the vessels have not had the same inscription. Such was e. g. the find in Lo-yang where the famous Nie Ling vessels (B 22—25 below), which differ from one another, were found together with other vessels containing quite different inscriptions (B 30—32 and B 33). Another famous example is that of the two Yü Ting (B 17 and B 19) with different inscriptions, which in the early years of Tao-kuang's reign were found together in Mei-hien of Shensi. A particularly interesting find which combined both phenomena (vessels of different inscriptions found together, and series of vessels with the same inscription) was that in Jen-ts'un of K'i-shan-hien in Shensi, made in 1890. The conditions attending the find were controlled by a special emissary of the famous collector P'an Tsu-yin, as narrated by Lo Chen-yü (Chengsung 3: 35). In one and the same pit were found, first, 6 bells with the same inscription (K'o Chung); secondly, 7 tripods with the same inscription (K'o Ting) different from that of the bells but relating to the same person (K'o); and, thirdly, 4 tripods with the same inscription (Chung I-fu Ting) quite different from that of the K'o Chung and the K'o Ting.

A third argument of Maspero's has surprised me very much indeed. It is when he shows that the Kuo ki Tsï po P'an mentioned above has numerous parallels in phraseology and rimes with certain odes in the Shï king and has also some points of contact with the Shu king, and, because those phrases and rimes are found scattered in various sections of these works, he draws the conclusion: »Il est . . . probable que l'inscription a été fabriquée de toutes pièces à l'aide de centons du Shï king et du Shu king par un lettré moderne» (p. 137). This reasoning might be allowable if it were a question of a modern Western country. In ancient China the same theme, the same phraseology, the same rimed stanzas right in the middle of a prose text crop up everywhere, they are a *commune bonum*, woven by every author into his own fabric without the least hesitation or compunction. Many bronze inscriptions are entirely in verse (see e. g. Wang Kuo-wei: Liang Chou kin shï wen yün tu, in the collected works of that author) and could equally well have been inserted in the Shï king by Confucius as many other poems — there is no difference at all in principle. Many other inscriptions, in prose, are extremely similar to chapters in the Shu king and the Yi Chou shu — a particularly good instance is the famous Mao kung Ting, B 143 below — and, here again, there is really no fundamental difference. They could equally well have occurred in the Yi Chou shu as some of its present chapters. It is important to remember that, as shown by various Chou time passages, the early *book* in China was the *ritual bronze*. Whereas smaller notes were made on slips of wood or bone or tortoise shell, more lengthy and important documents were preserved by being inscribed in ritual bronzes. The genuine Shu king chapters and the odes of the Shï as well as the short chapters of the Yi Chou shu may very well have been cast in bronze long before they were transcribed into ordin-

ary wooden manuscripts. That a bronze inscription is similar to and has identical phraseology with Shï odes or Shu chapters is therefore not only not surprising; it is just what would be expected, and Chinese scholars such as Wang Kuo-wei, Kuo Mo-jo, Wu K'i-ch'ang and many others are perfectly justified in following exactly the opposite procedure to that of Maspero: they adduce the parallels of an inscription with certain odes in the Shï, the dates of which are approximately known, in order to date the inscription — the parallels give a hint of the *milieu* in which the master of the bronze has lived.

Finally Maspero has taken umbrage at the fact that the bronze inscriptions describe the ceremonies of investiture so as to show three different modes of procedure. This, he insists, is entirely contradictory to all that we know from the Li ki and the Chou li about these rites: there was one and only one fixed ceremonial for these occasions. We may state in reply that the Li ki and the Chou li are both works of late Chou time (the former having been collected into a whole only in Han time), and that they are not of course authoritative as throwing light on the rites of the Western Chou epoch some 500 or 600 years before their composition. No one seriously believes that the early Chou time institutions and life were exactly as they are described in the rigorous Confucian rituals. The latter are really scholarly speculations as to how things *ought* to be done and, according to their suppositions, probably were done in the golden age of the sages. Real life in the centuries 1122—771 B. C. cannot possibly have followed the narrow and strict rules of Confucian orthodoxy of the centuries 500—250 B. C.; there must have been freedom and variety in the age of the first great bloom of Chou culture. That the bronze inscriptions do not tally with the pedantic rules of Confucianism does not really imply any flaw in their authenticity.

Maspero's criticism has thus failed to convince me. I am in much the same position here as I am in regard to the question of the authenticity of ancient Chinese texts. At first I was greatly impressed by the modern radical critics who wanted to throw practically all the Chou literature on the rubbish heap; when I went into the question thoroughly, I became more and more convinced that the criticism had gone far beyond its premisses. (Cf. BMFEA vols. 1 and 3). From studying the bronze inscriptions I have become more and more convinced that the main bulk of them, such as given in the repertories of the best and most experienced Chinese collectors, is on the whole quite reliable.

There are several facts which speak strongly in their favour.

In the first place, it is remarkable how comparatively seldom persons and events known from early literature occur in the inscriptions. If any considerable number of the bronzes of the standard repertories had been forged in later times, we should have expected to find a great many allusions to famous persons and well-known happenings such as are recorded in Sï-ma Ts'ien and in Ch'un-ts'iu, Tso-chuan, Kuo-yü, Chan kuo ts'ê. There are very few such indeed. When

really spurious allusions of that kind do occur, they are generally so naively worded that the fraud is easily seen and has been detected long ago by the Chinese critics.[1])

In the second place, there is an interesting phenomenon in regard to the dating of the vessels. Those of Western Chou have followed a different procedure from those of the feudal period of Eastern Chou. We shall revert to this question on p. 24 below. Here we wish only to point out that recent forgers could not have co-operated so systematically and with such expert knowledge as to have succeeded in maintaining such a difference.

In the third place, we have in our hands a touch-stone infinitely more valuable and effective than any speculations about details such as have been discussed above. It is the style and decoration of the vessels. We shall lay down the following law: if we classify the bronzes into chronological groups exclusively according to their inscriptions and thus obtain a series of distinctive groups; and if then it turns out that clear distinctions in type and decoration correspond to these distinctions, then the inscriptions on the whole (there will always be isolated exceptions) are not forged, they are authentic. For it is inconceivable that a number of recent forgers, working independently and on isolated specimens, could have had the expert knowledge of details of decoration and inscriptions that would have enabled them unfailingly to put the proper inscription on the proper kind of vase. They would necessarily have given themselves away; for this typological analysis has not yet been made in China. It is one of the main objects of the present article to show that this touch-stone decides in favour of the inscriptions. To their different chronological groups there actually correspond, as we shall see, different groups of type and decoration.

Is there then really no risk of our conclusions' proving misleading through our basing them on spurious inscriptions? There certainly is a considerable risk, and that is why we have repeatedly emphasized the importance of working only with materials accepted by the best Chinese experts. We now wish to revert more in detail to this question.

The inscription materials divide themselves into three groups:

1) The Sung time repertories (Po ku t'u lu, K'ao ku t'u etc.). These have two disadvantages. On the one hand, the vessels are almost all lost and we have to go after clumsy drawings (of vessels and characters). On the other hand, we have not even the original drawings but only more or less late reproductions of them. Thus we cannot study the hand-writing or the finer details of the decoration.

[1]) About the *Shï Tan Ting* Maspero writes (*loc. cit.* p. 134): »Nombre de celles-ci (i. e. the inscriptions) sont tout à fait suspectes, à première vue, par le seul contenu. Les épigraphistes chinois ne s'étonnent pas qu'on ait retrouvé un vase rituel consacré par le duc de Chou à sa mère T'ai-sï, femme du roi Wen, pour son temple ancestral; ils en sont très satisfaits. . .» This is not quite just. It is true that this inscription is still accepted by some Chinese scholars (e. g. Kuo Mo-jo, Ta-hi p. 29), but Wang Kuo-wei has duly recorded it as »suspect».

Yet the Sung works have a very great advantage: they seldom present any forged materials. In them we escape all the Yüan, Ming and Ts'ing copies of archaic bronzes. In Sung time the knowledge of archaic art and epigraphy was still too little developed to allow of forgeries on any considerable scale or of a quality calculated to deceive.

2) The Imperial catalogues of the Ts'ing dynasty (Si ts'ing ku kien, Si ts'ing sü kien [kia pien and yi pien], Ning shou kien ku). They furnish extremely risky materials, all the more risky since both the vessels and the inscriptions are simply drawn, Sung fashion, and no rubbings are given. An analysis of the script type cannot therefore help to decide questions of authenticity. For a time we were tempted to leave out these materials altogether, and to make use only of the selected best pieces from the Imperial collections so excellently published by Jung Keng (Pao yün lou i k'i t'u lu and Wu ying tien i k'i t'u lu). But we have been able to follow a middle path thanks to the same scholar. It cannot be too strongly underlined that we Western students should avail ourselves of the expert knowledge of Chinese collectors. When experts like Wu Ta-ch'eng, Lo Chen-yü, Wang Kuo-wei, Jung Keng, Shang Ch'eng-tso and various others have handled a vessel, examined it thoroughly, studied its inscription and found it authentic, we have already a very fair chance of possessing genuine materials. Now Jung Keng has taken upon himself the heavy task of going through all the Imperial vessels and drawing up a table of the authentic and the spurious ones (Yen king hüe pao vol. 5). The author tells us how he was first a member of a committee for the purpose of sorting these bronzes, but was dissatisfied with its hasty method of working; how he went on alone for a long time handling and rehandling the bronzes and finally arrived at the opinion as to their authenticity as recorded in his article. One of the best experts on Chinese bronzes now living and himself possessor of a small but choice collection (see Sung chai ki kin t'u lu), Jung Keng is the best guide to the Imperial catalogues that we could wish for. He has not been lenient, rather, we think, sometimes too severe. But if we follow him and make it a rule never to quote a bronze which he has not sanctioned, we are certainly, on the whole, on the safe side.

3) The long series of catalogues of private collections published during the 19th and 20th centuries. Here the risk of spurious materials is much smaller. In the Imperial collections everything was included, presents, various acquisitions, quite uncritically. The best private collectors have had refined taste and have exhibited great skill in selecting their treasures, and in a work like that of Wu Ta-ch'eng (Heng hien so kien so ts'ang ki kin lu) we need hardly fear a single forged piece. But here again we have a valuable additional safety valve. Wang Kuo-wei, one of the keenest scholars and best experts on Chinese bronzes that China has ever had, has taken infinite trouble in going through all the great repertories of bronze inscriptions and sorting out those which he considered spurious or at least suspect. His lists, extended and revised by Lo Fu-i (San tai

Ts'in Han kin wen chu lu piao) form an indispensable aid to everyone who has to do with Chineses bronzes. Wang has also been quite severe. He does not hesitate to condemn freely even in such famous collections as that of Tuan Fang (T'ao chai) or that of Ts'ao Kuei (Huai mi shan fang). Great and famous repertories like the Kün ku lu kin wen have sometimes been heavily pared. Thanks to this critical work of Wang Kuo-wei's the Western student can feel comparatively safe as long as he keeps within the bounds of the vessels accepted by Wang in the standard repertories which he has critically examined. In limiting himself to these materials the student may sometimes miss an inscription which is not in those works or which has been undeservedly condemned by Wang. But it is better to err in the direction of excessive caution. Of course, since this work was published a great many new bronzes have appeared, and it is sometimes difficult to decide which should be accepted and which rejected. A very extensive body of new material has been provided by Lo Chen-yü in his Cheng sung t'ang tsi ku i wen (with Sü and Pu-yi), and since Lo is a first-rate authority and moreover had the assistance of Wang Kuo-wei for many years, this repertory is authoritative. The illustrated catalogue of Liu T'i-chï (Shan chai tsi ku lu) is another important new publication; most of its inscriptions are already embodied in Lo's work[1]). So is also the Shï er kia ki kin t'u lu published by Shang ch'eng-tso. A number of important inscribed vessels are to be found in five well-known foreign catalogues: the Sumitomo catalogue (Senoku Seishō), the Eumorfopoulos catalogue, Bronzes antiques de la Chine by Tch'ou tö-yi (C. T. Loo's catalogue), the Yamanaka catalogue (Hakkaku Kikkin shū) and, above all, Umeharas great album of bronzes in European and American collections (Shina kodō seikwa). We shall use the following abbreviations:

1. Po = Süan-ho po ku t'u lu.
2. K'ao = K'ao ku t'u.
3. K'ao sü = Sü K'ao ku t'u.
4. Kukien = Si Ts'ing ku kien.
5. Sükia = Si Ts'ing sü kien kia pien.
6. Süyi = Si Ts'ing sü kien yi pien.
7. Ningshou = Ning shou kien ku.
8. Shïliu = Shï liu ch'ang lo t'ang ku k'i k'uan chï.
9. Huaimi = Huai mi shan fang ki kin t'u.
10. Ch'angan = Ch'ang an huo ku pien.
11. Kün = Kün ku lu kin wen.
12. Lianglei = Liang lei hien i k'i t'u shï.
13. P'anku = P'an ku lou i k'i k'uan chï.
14. Heng = Heng hien so kien so ts'ang ki kin lu.
15. K'i = K'i ku shï ki kin wen shu.
16. T'ao = T'ao chai ki kin lu.
17. K'ia = K'ia chai tsi ku lu.

[1]) The Cho i chai i k'i k'ao shï recently published does not give new inscriptions so much as valuable discussions on already known ones.

1 宣和博古圖錄
2 考古圖
3 續考古圖
4 西清古鑑
5 西清續鑑甲编
6 西清續鑑乙编
7 寧壽鑑古
8 十六長樂堂古器款識
9 懷米山房吉金圖
10 長安獲古编
11 攈古錄金文
12 兩罍軒彝器圖釋
13 攀古樓彝器款識
14 恒軒所見所藏吉金錄
15 奇觚室吉金文述
16 陶齋集古錄
17 愙齋集古錄
18 貞松堂集古遺文
19 夢鄣草堂吉金圖
20 寶蘊樓彝器圖錄
21 武英殿彝器圖錄
22 澂秋館吉金圖
23 綴遺齋彝器考釋
24 松齋吉金圖錄
25 鄴中片羽
26 善齋吉金錄
27 雙劍誃吉金圖錄
28 雙玉璽齋金石圖錄
29 海外吉金圖錄
30 泉屋清賞
31 泉屋清賞別集
32 白鶴吉金集
33 周漢遺寶
34 藝術叢編
35 十二家吉金圖錄
36 傳古別錄
37 周金文存
38 殷文存
39 支那古銅精華
40 兩周金文辭大系
41 兩周金文辭大系圖錄
42 古代銘刻彙考
43 古代銘刻彙考續编
44 金文餘釋之餘

18. Chengsung = Cheng sung t'ang tsi ku i wen.
19. Mengwei = Meng wei ts'ao t'ang ki kin t'u.
20. Paoyün = Pao yün lou i k'i t'u lu.
21. Wuying = Wu ying tien i k'i t'u lu.
22. Chengts'iu = Cheng ts'iu kuan ki kin t'u.
23. Choichai = Cho i chai i k'i k'ao shï.
24. Sungchai = Sung chai ki kin t'u lu.
25. Yechung = Ye chung p'ien yü.
26. Shan = Shan chai ki kin lu.
27. Shuangkien = Shuang kien ch'ï ki kin t'u lu.
28. Shuangyü = Shuang yü si chai kin shï t'u lu.
29. Haiwai = Hai wai ki kin t'u lu.
30. Senoku = Senoku seishō (Sumitomo catalogue).
31. Senoku Betsu = Senoku seisho Besshū (Sumitomo cat. addit. vol.).
32. Hakkaku = Hakkaku Kikkin shū (Yamanaka catalogue).
33. Shūkan = Shū Kan i hō.
34. Ishu = I shu ts'ung pien.
35. Shïerkia = Shï er kia ki kin t'u lu.

36. Ch'uanku = Ch'uan ku pie lu.
37. Choukin = Chou kin wen ts'un.
38. Yinwen = Yin wen ts'un.
39. Umehara = Shina Kodō seikwa or Selected relics of ancient Chinese bronzes from collections in Europe and America, 1933.
40. Tahi = Liang Chou kin wen ts'ï ta hi (Kuo Mo-jo).
41. Tahi t'ulu = Liang Chou kin wen ts'ï ta hi t'u lu (Kuo Mo-jo).
42. Hueik'ao = Ku tai ming k'o huei k'ao (Kuo Mo-jo).
43. Hueik'ao sü = Ku tai ming k'o huei k'ao sü pien (Kuo Mo-jo).
44. Yüshï = Ming wen yü shï chï yü (Kuo Mo-jo).
45. Tch'ou = Bronzes antiques de la Chine appartenant à C. T. Loo et Cie, 1924, par Tch'ou Tö-yi.
46. Eumorfopoulos = The George Eumorfopoulos Collection of Chinese and Corean Bronzes . . . . . . by W. Perceval Yetts, 1929, 1930.

* * *

Our first and fundamental task is to try and find a reliable distinction between Yin and Chou inscriptions. Chinese philologists have for many centuries followed the principle of regarding very short and clumsy inscriptions, especially when they contain some strongly pictorial elements, as pre-Chou; in the earlier stages (Sung catalogues) they placed some even in the Hia dynasty, in more recent times they have contented themselves with speaking of 商 Shang = 殷 Yin (we shall always use the term Yin in the present article for simplicity's sake). And to Yin they always attribute the very large number of bronzes which have a short line containing the words: 父甲 »to father Kia» (Yi, Ping, Ting etc., cyclical characters) or: 且甲 »To grandfather Kia», since we know that the Yin people used the »ten stem» characters as personal names. A typical publication along these lines is the Yin wen ts'un by Lo Chen-yü, and many recent catalogues still follow these principles. The results to be published in the present paper will indeed confirm to a large extent these attributions to Yin time of the said types of inscriptions and thus show that the Chinese experts, here as in so many other cases, have had a sure and reliable instinct which has put them on the right lines. But we cannot accept this rather hazy and indefinite norm — that inscriptions of a more or less »primitive», short, clumsy, pictorial type are Yin inscriptions — as a point of departure in our study. It gives us no solid and definite basis to work on. Indeed, we can show, on the contrary, that the same »primitive» elements incontestably existed also in Chou time. That the custom of using the »ten stem» characters as personal names lived on far into the Chou epoch is shown by a great number of inscriptions (see e. g. Tahi pp. 8, 11, 16, 21, 25, 28, 30 etc.). And primitive, pictorial elements are often added at the end of indubitable Chou inscriptions. Thus, the famous Nie Ling vessels of Chao wang's time (B 22—25 below) have at the of the inscription a crude picture of a bird. And the much discussed symbol: 天黽, earlier inter-

preted as *tsï sun* »sons and grandsons» but left unexplained by modern scholars, and which is one of those that Lo Chen-yi in the Yin wen ts'un takes as a criterion of Yin time, appears e. g. at the end of the famous Hien hou Ting of Ch'eng wang's time (B 12 below). Two 册 and the figure of a posturing man with some sort of head ornament — a very »Yin-like» element — is to be found at the end of the equally famous Ch'en-ch'en Yu inscription (B 30—32), without any logical connection with the rest of the inscription. We see, then, that the hitherto current criteria of Yin inscriptions are untenable; in the great majority of cases they are true, but there are so many exceptions that we cannot build on them as a safe basis.[1])

Thus we have to resign ourselves to the fact that a large number of inscriptions which the Chinese scholars have recorded without hesitation as Yin (»To father Sin», »To grandfather Yi»; sacrificial scenes; victims; animals; weapons etc.) are useless for our purpose here, since they might equally well be of Chou as of Yin time. They come to swell the very large category of inscriptions that are of too indifferent a content to be of any use, e. g. the many vessels with: *tso pao tsun i* »[I] have made a precious vessel»; »*X tso pao tsun i, tsï sun yung pao yung* »X (a name of one or two characters which tells us nothing whatever) has made the precious vessel, may sons and grandsons for ever treasure and use it». It is unfortunately no exaggeration to say that the majority of Chinese bronze inscriptions are quite undatable; not only undatable in the narrow sense of the word but undatable in its widest sense: we cannot tell even whether they are from Yin or Chou time.

If, therefore, we cannot base our analysis of Yin style on all the vessels the inscriptions of which the Chinese scholars have labelled as Yin (Shang), we must try to find a more definite group, the inscriptions of which we can really *prove* to be pre-Chou. Fortunately this is by no means impossible.

We have registered below (categories B, C and D) a considerable number of inscriptions, 649 in all, which we can with certainty attribute to the Chou epoch; the reasons for this attribution are given in detail below. Now there are quite a number of simple pictorial characters: sacrificial scenes, men carrying standards, two big eyes, a stand with arrows, a man carrying strings of cowries, and such-like, which never occur together with any of these 649 proved Chou inscriptions. Is it not certain, then, that they are anterior to the Chou era, i. e. of Yin date, as the Chinese scholars have supposed? No, it is highly probable, but not certain. For they may be idiographs which were not used simultaneously with real inscriptions; if so, they may be of Chou date just as well as of Yin date. Some of them, indeed, do occur once or twice together with other

[1]) It will not do at all to try and use the characters of the oracle bones as a kind of touchstone for Yin inscriptions on bronzes. The different materials have resulted in very differently executed characters, and a great many undeniably Yin bronzes have characters differing very widely from those of the oracle inscriptions on bone or tortoise shell.

characters having a real inscriptional sense; but the examples are too few to allow of safe conclusions' being drawn from them.

Quite different is the case of three other elements of very frequent occurrence: 亞 the so-called *ya-hing* 亞-shaped cartouche: 析子孫 read 析子孫 *si tsï sun;* and 㪺 or 八 read 舉 *kü* in the repertories. The meaning of these symbols has been much discussed but is still very obscure. This is not essential to us here. The facts of primary importance are the following:

1) These three symbols frequently occur together with real texts of sometimes considerable length. Thus, if they were current in Chou time at all, we should expect them to crop up sometimes in the beginning or at the end of the 649 inscriptions which we can prove to be of the Chou era.

2) When these three symbols stand together with real texts, the latter never contain anything which points with any certainly to the Chou period, i. e. these texts are never of the kinds which we have registered in categories B, C and D below; in other words: the inscriptions which we have registered in categories B, C and D, and which have this in common that they all contain something which reveals them to be of the Chou epoch, never have (in the same way as they sometimes have other extra symbols, e. g. the 册 and a bird, or the symbol mentioned p. 19, last line) an additional 亞 *ya* or 析子孫 *si tsï sun* or 舉 *kü.*

There can only be one conclusion: these three symbols, the *ya-hing*, the *si tsï sun* and the *kü*, were obsolete at the time when the Chou dynasty started. If they are never combined with provable Chou inscriptions, in spite of the fact that they do occur together with real texts, it is because they are *of another age* than the Chou inscriptions: and since they are not from Han time (this being exluded by the script type of their texts) *they date from pre-Chou time, i. e. from the Yin dynasty.*

These statements are of such primary importance that they require an extensive exemplification.

The 亞 *ya-hing* occurs together with real texts e. g. in the following inscriptions:

Yin wen ts'un, shang 5;
Chengsung, Pu shang 8;
Chengsung, Sü shang 19;
Chengsung 2: 36;
K'ia 3: 3;
Küun 2/1: 20;
K'i 16: 3;
K'ia 3: 3 a;
T'ao 1: 26;
K'i 16: 6;
T'ao 1: 25;
K'ia 6: 5;
Chengsung, Pu shang 13;
Kün 1/3: 32;
Chengsung, Sü shang 26;
Kün 2/2: 32;
Chengsung 4: 12;
Chengsung 4: 38;
Kün 2/1: 24;
Kün 2/1: 5;
K'ia 12: 3;
K'i 1: 11;
K'i 3: 20;
Chengsung 4: 47;
Chengsung 5: 7;
K'i 3: 15;
Chengsung, Sü shang 44;
K'ia 13: 3;

K'ia 13: 16;
Chengsung 7: 13;
K'i 17: 4;
K'ia 13: 3;
Chengsung, Sü chung 8;
K'i 5: 9;
Yin wen ts'un Shang 24;
Kün 1/3: 52;
T'ao 2: 34;
Chengsung 8: 23;
Ibid.;
Chengsung 8: 24;
Chengsung 8: 25;
Chengsung, Sü chung 19;
Kün 2/1: 80;
Chengsung 8: 28;
K'ia 16: 19;
Chengsung 9: 9;
Chengsung, Pu chung 19;
Ibid.;
Chengsung, Pu chung 18;
Kün 1/3: 65;
K'i 5: 5;
T'ao 3: 26;
Chengsung 9: 27;
Chengsung, Sü chung 37;
T'ao 3: 29;
K'i 18: 7;
K'ia 22: 22;
K'ia 21: 18.

The 析子孫 *si tsï sun* occurs together with real texts e. g. in:

K'ia 3: 5;
Chengsung 2: 41;
Chengsung 2: 44;
K'i 2: 1;
K'ia 6: 8;
K'i 16: 4;
Kün 2/1: 14;
Chengsung, Pu shang 18;
Ibid ;
Chengsung 4: 43;
K'i 3: 20;
Chengsung, Sü chung 8;
Kün 2/1: 36;
T'ao 1: 45;
Chengsung 7: 18;
K'i 5: 9;
Yin wen ts'un, Shang 39;
Kün 2/1: 8;
Chengsung, Pu chung 6;
K'i 6: 10;
T'ao, Sü shang 40;
Kün 2/1: 80;
T'ao 2: 36;
K'i 6: 13;
Chengsung 8: 29;
Chengsung, Sü chung 24;
Chengsung 8: 42;
Chengsung, Sü chung 29;
K'ia 20: 13;
K'i 7: 29;
Kün 2/1: 70.

The 舉 *kü* (in one or other of its two variants) occurs together with real texts e. g. in:

Shan 2: 35;
K'ia 6: 17;
K'ia 17: 6;
Chengsung, Pu shang 15;
Kün 1/2: 78;
Kün 1/3: 30;
Chengsung, Sü shang 36;
Kün 2/1: 41;
Chengsung 7/12;
Chengsung Sü chung 9;
Kün 1/3: 27;
Chengsung 8: 18;
K'i 18: 6;
Chengsung 9: 23;
Kün 1/2: 58;
Heng 70;
Yin wen ts'un, Hia 19;
Chengsung, Pu chung 9;
K'ia 18: 20.

None of these texts contain anything that points to Chou.[1])

In category A below we have brought together 337 cases of the three inscription symbols; they are all cases in which we have pictures of the vessels. If we were to add the *ya-hing, si tsï sun* and *kü* inscriptions occurring in non-illustrated publications, the number would rise to something between 450 and 500. These 450—500 bronze inscriptions never contain Chou-time criteria: the 649 inscriptions of categories B, C and D, which contain Chou-time criteria, never have the *ya-hing*, the *si tsï sun*, the *kü*. Our conclusion that these three symbols existed only in Yin time and were obsolete in Chou time is fully corroborated.

A. YIN BRONZES.

For the reasons given above we have strictly limited our materials to such bronzes as have *ya-hing, si tsï sun* or *kü*. They furnish us with material which, while perfectly safe, is yet quite comprehensive and sufficient for determining the style of the Yin bronzes. We can therefore afford to leave out entirely all the vessels with short, »primitive» inscriptions, the Yin date of which is only probable but not provable.

Vessels 1—189 and 324—333 have the *ya hing*, 190—244 an 334, 335 have *si tsï sun*, 245—323 and 336, 337 have *kü* — all with or without additional characters. Since the inscriptions call for no further comment, we give no list of the vessels here; all the references will be given in the chapter in which their stylistic features are discussed.

* * *

B, C, D, E. *Chou bronzes.*

The inscriptions from Chou time fall into four groups.

In category B we place vessels from Royal Chou. Nearly all of these can be proved to belong to the period of Western Chou (1122—771), anterior to the removal of the capital from Shensi to Honan (by P'ing wang, in 770 B. C.). For the details see the commentaries on the various vessels below. After the removal to Lo-yi the Royal House of Chou very rapidly lost its power and riches and lived a modest and pauper life (the poverty and helplessness of the Royal Chou is revealed already by the early years of the Ch'un ts'iu and the

[1]) There are actually two exceptions to the general rule. One is K'ia 16: 19, which has the *ya-hing* and yet says: 匽侯錫 »The prince of Yen gave. . .». One is K'i 17: 12, which has the *si tsï sun* and yet says: 庚姬 »The lady Keng Ki has made. . .» (Ki being a common clan name of Chou time). Is it too bold to venture the conclusion that these absolutely isolated cases against such a formidably well-documented general rule are due to forgeries? Or are they stray examples of archaized inscriptions made in Chou time?

Tso chuan, cf. Yin kung, 3rd year); there was no longer any scope at its Court for a high standard of bronze art. The leading part was from now on played by the various feudal courts.

In category C we place all vessels which can be attached to a certain feudal state, it having been made either by (or for) a prince or a princess of that state, or at least by (or for) a person originating from that state. In the latter case it is not always certain that the vessel was really made in the said state, for Mr. X of Lu might very well have removed to Cheng and practised his art there. But in the great majority of cases the vessels may be expected to derive from the state whose name they bear.

In category D we place certain vessels which cannot be defined so closely: they cannot be attached to a certain state but are none the less clearly of the Chou period and connected with one or other of the feudal states, since their inscriptions contain the clan names (*sing*) of the feudal families (Ki, Kiang, Jen etc.) of the Chou epoch.

As to the relative age of categories B, C and D, a few words should be added. Category B is entirely from the period of Western Chou, 1122—771 B. C. In categories C and D there are certainly a few vessels which have to be placed as far back as that period; but the great majority are of a later date, from Eastern Chou time (770—256). There is a highly interesting phenomenon which proves this. If we examine the dating system of dated vessels of cat. B in regard to the four quarters of the month (初 吉 *ch'u ki* the 1st quarter, 既 生 霸 *ki sheng pa* the 2nd quarter, 既 望 *ki wang* the 3rd quarter, 既 死 霸 *ki sï pa* the 4th quarter, cf. Wang Kuo-wei Kuan t'ang tsi lin 1: 1), we find a perfectly free system:

1st quarter (*ch'u ki*): B 3, 23, 34, 35, 55, 66, 89, 90, 93, 96, 97, 99, 101, 102, 103, 105, 106, 107, 110, 111, 112, 122, 125, 129, 133, 152, 154, 155, 156, 157, 160, 161, 167, 172, 179, 190, 194, 198, 200, 203, 208;
2nd quarter (*ki sheng pa*): B 33, 43, 47, 78, 80, 81, 83, 84, 86, 113, 130, 137, 150, 151, 159, 171, 173, 174, 175, 178, 191;
3rd quarter (*ki wang*): B 19, 30, 40, 42, 44, 60, 61, 79, 82, 92, 142, 144, 180, 199, 201, 207;
4th quarter (*ki sï pa*): B 22, 45, 48, 116, 117, 118, 158, 181, 195, 202, 206.

In categories C and D, on the contrary, the quarter is always the 1st (*ch'u ki*), and the day is preferably *ting-hai*. We shall place here an asterisk after the *ting-hai* cases:

1st quarter (*ch'u ki*): C 1*, 2*, 7, 15, 25, 29, 30*, 31*, 39, 40, 45*, 46*, 48, 82, 83, 98*, 104, 120, 130*, 135, 136, 141, 142*, 158*, 159*, 171*, 174, 178, 182*, 198*, 199*, 200*, 204, 215, 219, 226*, 230, 232*, 233, 234, 266, 274*, 277*, 284*, 289*; D 14, 22, 30, 41*, 50*, 76*, 102, 118*, 120, 133.
2nd quarter (*ki sheng pa*): C 20 (a vessel from Chou!).

There are 60 different cyclical day-naming combinations, *kia-tsï*, *yi-ch'ou* etc.

The fact that one of the 60, the combination *ting-hai*, occurs in 26 out of 55 inscriptions cannot be by mere chance but must have its special reason, just as well as the striking fact that 55 out of 56 inscriptions refer to the 1st quarter.

Now it is obvious that the bronzes were not always cast in the first quarter of the month, nor regularly on the rare days ting-hai: we have here a conventionalized phrase without any real connection with the actual date of the casting. This is no unknown phenomenon in China. On Han-time mirrors the day is preferably given as *ping-wu* even in months which we know for certain contained no *ping-wu* day (see Karlgren, Early Chinese mirror inscriptions, BMFEA 6, p. 48). There was a special symbolic reason for this (*loc. cit.*) and something similar must have been the case with the phrase *ch'u ki ting-hai* on the feudal bronzes[1]. Since it is inconceivable that the feudal kingdoms could have such an advanced custom of conventionalized dating at the same time as the Royal Chou had an original free dating system, we must conclude that we are here confronted with a difference in period. Indeed, the *ch'u ki ting-hai* formula becomes common in the last reigns of Western Chou (B 99, 102, 103, 105, 106, 107), and the feudal states seem to have followed the lead. The feudal vessels with the *ch'u ki ting-hai* formula are therefore to be placed in the period from about 800 B. C. to 256 B. C. (end of the Chou dynasty), and the majority must be from Eastern Chou time (770—256). Moreover, since there is no reason to believe that just those feudal vessels which happen to have the month quarter indicated should be later than their undated sister vessels, we can assume it to be fairly likely that the great majority of the feudal vessels belong to this period.

Finally, in category E we place a number of vessels which have names of the type X-fu, e. g. 事 父 Shï-fu, 孟 義 父 Meng I-fu. This onomastic type is indeed highly interesting. In our list (p. 21 above) of proved Yin inscriptions, practically all of which contain names of persons, there is not a single example of this name type. In the inscriptions of categories B, C and D, which contain criteria showing that they belong to the Chou era, they are, on the contrary, very common: there are 117 inscriptions containing X-fu names in those categories. These inscriptions added to the 147 inscriptions of cat. E give us a list of 264 inscriptions containing X-fu names, and not a single one of them has a *ya-hing*, a *si tsï sun* or a *kü*, the above-mentioned Yin criteria. We are therefore fully authorized to conclude that the name type X-fu is a sure indication of Chou time, as against Yin time.

On the other hand, by the aid of texts we can draw a lower limit for their occurrence. In the Ch'un ts'iu and Tso-chuan (722—469 B. C.) there are several hundred X-fu names. But it is interesting to observe that they are

[1]) The ritual I-li, Shao lao kuei shï li (Couvreur p. 582), says that at the *shao lao* sacrifice, which is there described, the formula used by the performer of the ceremony was this: »Your respectful grandson So-and-so will on the next day *ting-hai* offer up the gifts of the year to his august grandfather So-and-so.» This shows that the day *ting-hai* had a special ritual significance.

more frequent in the beginning of those chronicles than in their later parts. And this is important. It must be remembered that in regard to the earlier parts of the Ch'un ts'iu period the Tso chuan is very brief, but it is a broad and extensive narrative as far as concerns the later parts. Hence, if the onomastic type X-fu had been equally common in the 6th and 5th centuries as it was earlier, we should have had an increasing, not a decreasing number of examples. If we then go to the historical texts of the Warring States' period (roughly 400—250 B. C.), Chan kuo ts'ê and Lü shï ch'un ts'iu, there are no examples at all of this name type. Evidently the X-fu names were obsolete about 400 B. C., and all bronzes bearing such names have to be placed between 1122 and 400 (roughly) as extreme limits.

In categories B, C, D and E we record not only the inscriptions on vessels of which we have illustrations, but also those quoted in unillustrated repertories. This is useful for two reasons. On the one hand, it gives us an approximate idea of the number of inscriptions[1]) which we can prove to be of Chou date, and serves to corroborate our above conclusion as to the Yin nature of the symbols (*ya hing, si tsï sun, kü*) which do not occur in any of these Chou inscriptions. On the other hand, many of the vessels here recorded as unillustrated undoubtedly exist in private collections in China or abroad, and it would be very useful if their owners, should they happen to read this article, in which their inscriptions are inserted in their proper place according to the chronological system, were to come forward and give us photographs of their treasures, thus filling out important gaps in our knowledge of the archaic bronzes.

The arrangement here will be as follows. In each group we place first all the inscriptions belonging to vessels of which we have illustrations. Along with them are placed only such unillustrated inscriptions as are connected by their contents with the former and therefore help us in dating them, or else give us a more complete idea of them. These unillustrated vessels we shall mark, for the sake of clearness, with an asterisk. Finally, at the end of each section we register those unillustrated vessels which have no connection with the illustrated ones.

Considerations of space forbid any attempt to give the inscriptions in translation *in extenso;* moreover this would force us to take up a position in regard to a great number of interpretative riddles, which we are not at all inclined to do at present. From each inscription therefore we shall quote only some lines or stray words which contain the criteria evidencing a Chou date.

A great many of the more important inscriptions occur in several of the well-known repertories; we have not deemed it necessary or useful to give all the

[1]) Of course the figures will always be much too low. We have already indicated above how, when selecting our materials, we have kept strictly within the bounds of the vessels approved of by prominent scholars. Many more could certainly have been added. On the other hand, every day sees new vessels brought out of the Chinese soil. There cannot be the slightest pretension to completeness.

cross-references, since they are already to be found in the index of Wang Kuo-wei and Lo Fu-i quoted above (p. 16), and also, to a large extent, in Kuo Mo-jo's Liang Chou kin wen ts'ï ta hi. We have as a rule quoted an inscription in the latest of the standard works, so as to facilitate the reader's finding the most recent and advanced version of its deciphered text. Thus, if an inscription occurs in Lo Chen-yü's Cheng-sung t'ang tsi ku i wen (Chengsung), we cite it there. If it is not there, we refer to Liu Sin-yüan's K'i ku shï ki kin wen shu (K'i); if it is not there, we refer to Wu Ta-ch'eng's K'ia chai tsi ku lu (K'ia); if it is not there, we refer to Wu Shï-fen's Kün ku lu kin wen (Kün); and so on. For the bronzes treated by Kuo Mo-jo we generally give references to his works as well, since they are clever and suggestive, though often very uncritical.

B. ROYAL CHOU BRONZES.

In discussing the dating of the vessels of this group let us first remark that for simplicity's sake we use the standard chronology of the Tsï chï t'ung kien, based on the chapter Lü li chï of the Ts'ien Han shu, the same chapter as that in which the San t'ung li of Liu Hin's is incorporated. This might be termed the »orthodox» chronology, as opposed to the chronology of the Chu shu ki nien. The former dates the beginning of the Chou dynasty in 1122 B. C., the latter in 1050 B. C.; they do not coincide until the year 841 B. C.[1])

Since it is impossible to tell which of the two comes nearest to the truth (Chavannes is certainly right in leaving that question entirely open), and since most works of reference keep to the orthodox chronology; since, moreover, it is of no capital importance from an archæological point of view whether we place Wu wang's accession to the throne in 1122 or in 1050, we might just as well avoid the confusion that would arise from introducing the dates of the kings of the Chu shu ki nien (even though that work is the oldest source available). There is all the more reason to accept — *faute de mieux* and only as a make-shift — the conventional reign list, since it is quite probable that both lists are unreliable. There is, for instance, the reign of Kung wang, which the orthodox chronology gives as having lasted 12 years (946—935); the Ti wang shï ki, as quoted by T'ai p'ing yü lan k. 84, says that it lasted 20 years, and Huang-fu Mi (as quoted by T'ung kien wai ki) gives it as 25 years. The Chou reigns anterior to 841 are therefore mere approximations. The names and sequence of the kings, on the contrary, seem to be quite certain; hence any possible errors in the orthodox list cannot concern more than a few decades of years at the utmost.

The list of the kings of Western Chou and their reigns according to the standard chronology is as follows:

[1]) For full details see Chavannes, Mém. Hist. I, p. CLXXXVI ff.

Wu wang 1122—1116
Ch'eng wang 1115—1079
K'ang wang 1078—1053
Chao wang 1052—1002
Mu wang 1001—947

Kung wang 946—935
Yi wang[1]) 934—910
Hiao wang 909—895
Ih wang 894—879
Li wang 878—842
Interregnum (Kung ho) 841—828
Süan wang 827—782
Yu wang 781—771

As already stated above, there are two recent authors who have tried to determine the exact dates, or at least the definite reigns, in which a great many bronze inscriptions of this period have been cast: Wu K'i-ch'ang and Kuo Mo-jo. Wu takes the astronomical data as his fundamental point of departure and fills them out with supplementary evidence of other kinds. Kuo goes the opposite way; he bases himself on various small criteria in regard to names and places, and only occasionally does he adduce the datings as a support for his views; his arguments are sometimes quite ingenious, but generally he advances the most flimsy evidence. How great is the risk involved in trying to fix the exact date of an inscription *à tout prix* is shown by a comparison of the results of these two scholars. They diverge in the most astonishing fashion. Whereas Wu has a long series of vessels from Chao wang's reign, Kuo has hardly any. Kuo has quite a number from Mu wang's, Wu practically none. Many of the vessels which Wu places at the very beginning of the Western Chou period Kuo places at the end and *vice versa*. We can take neither the list of Wu nor that of Kuo as our point of departure.

We shall proceed here along somewhat different lines. We shall not insist upon exactly dating or definitely attributing every vessel to a certain reign. We shall be quite satisfied if we can attribute it, with a fair degree of probability, to the f i r s t h a l f or to the s e c o n d h a l f of the Western Chou period. From an archæological point of view, a great deal is already gained by such an approximate method of dating. To the first half, then, we refer the reigns of the first five kings: Wu wang, Ch'eng wang, K'ang wang, Chao wang, Mu wang, i. e. the period 1122—947 according to the orthodox chronology. This was the first great period of bloom of the Chou culture. After the Chou régime had been founded and firmly consolidated during the reigns of Wu, Ch'eng and K'ang, an era of expansion and conquest set in with Chao and Mu and brought the Chou house to the zenith of its power and glory. With Kung wang begins its period of waning power and gradual decline. The second half is thus the period 946—771 B. C. From an historical point of view, then, 947 is a convenient date at which to divide the Western Chou into two sections of

[1]) We distinguish between the two »I wang» by an arbitrarily chosen difference of spelling: Yi and Ih.

176 years each. It should not be forgotten, however, as was pointed out just now, that the dates of the reigns anterior to 841 are mere approximations.

If, now, from the various *points d'appui* for dating the Western Chou vessels afforded by the Chinese philologists, old and new (Wu and Kuo of course have largely drawn upon earlier writers), we select a few which seem comparatively safe and reliable, we obtain a list of 33 illustrated vessels which can be attributed to the first half (1122—947) of Western Chou, and 22 illustrated vessels attributable to the second half (946—771) of that period. Thus we already have a considerable body of material for stylistic studies. But we need not stop there. We have still another means of enlarging these groups considerably: the study of the script. To the casual reader the script may seem to be fairly uniform during the whole of the Western Chou epoch; but in reality it is not so. It allows of age distinctions which are sometimes just as decisive and categorical as those based on the contents of the inscriptions.[1])

There are indeed quite noticeable differences. On the one hand certain variants in the execution of some characters are suggestive. There are, for instance, the characters 于 令 (命) 公 父. If the following forms occur: [archaic forms] (*yü* with an additional stroke at the right; *ling* (*ming*) with the figure of a kneeling man still quite discernible; *kung* with the two strokes connected with the mouth; *fu* with the hand and the vertical stroke kept distinguished, such as it is always written in Yin inscriptions), they generally indicate an early date. The forms of the later period are[2]): [archaic forms].

Again, the characters 文 and 武 have an additional radical 王 to the left in the earliest inscriptions.

But this variant criterion is of comparatively minor importance; a much better guide is the general character of the script, the *ductus* that is typical of the early and of the late period. It is practically impossible to express in words wherein the difference lies, and yet to the eye of the student who has long and carefully handled these inscriptions — always supposing they are long enough to give a definite impression — the difference is just as obvious as that between a T'ang and a Sung manuscript. Or, rather, there are certain inscriptions which the student with an experienced eye at once recognizes as being of the early type; there are others which he just as easily attributes to the later type; but there are also some which are so indifferent, so vague in the handwriting criterion that he cannot make a definite decision. In the latter cases he must not, of course, try to force the materials but he should leave the question open.

In this way, thanks to the script, we can add to the group of 33 illustrated early

[1]) In this respect, unfortunately, we cannot make use of the inscriptions in the Sung catalogues nor in the Imperial catalogues, these being drawn by hand, not rubbed.

[2]) This is no strict rule; there are exceptions in both directions. The later forms crop up in sporadic cases quite early, and now and then an early form services on fairly late bronzes. Yet the general tendency is unmistakable.

vessels, mentioned above, some 31 more, which belong to the first period; and to the group of 22 late ones, mentioned above, we can add 34 more, which belong to the second period. The remainder of our illustrated Western Chou vessels, which for lack of criteria either in contents or in script form we cannot attribute to either the first or the second period, is thus no more than 26.

I. *Inscriptions from the first half (1122—947) of Western Chou.*

B 1—8 form a group:

B 1. Ting. »In the 13th month, on the day keng-yin, the King was in the Han camp; the King said: 中 Chung . . . . to be a servant to king Wu (武 with an additional rad. 玉). . .». Tahi 20, drawing Po 2: 17.

B 2. Kuei. »The Eastern 夷 I Barbarians made a great insurrection; 伯 懋 父 Po Mou-fu with the eighth army of Yin attacked the Eastern I. .» Chengsung 6: 6, Tahi 13, photo Bull. Nat. Research Inst. 3: 2, and Tahi t'ulu 77, drawing Shan 8: 91.

B 3. Kuei. »In the 5th month, 1st quarter, on the day kia-shen, Mou-fu. . .». Chengsung 4: 47, Tahi 16, photo Wuying 57.

B 4. Hu. »In the 4th month, Po Mou-fu made an expedition to the North. . .». Tahi 16, drawing Kukien 19: 8.

B 5. Ting. »In the 3rd month, on the day ting-mao, 師 旅 Shï Lü . . . followed the King on an expedition in Fang-lei; he sent his friend Hung to report this to Po Mou-fu; Hung reported it to Chung. . .». Kuo, Huei k'ao, drawing Shan 2: 81.

B 6. Ting. »In the year when the King ordered 南 宮 Nan-kung to attack the rebellious 虎 方 Hu-fang, the King ordered Chung. . .». K'i 16: 9, Tahi 21 (note), drawing Po 2: 18.

B 7. Kuei lid. »它 T'o said. . . . 沈 子 Shen-tsï has made . . . . . with 周 公 Chou kung (the duke of Chou). . . ; . . . . . 同 公 T'ung-kung. . .». Chengsung, Pu shang 29, drawing Shan 8: 98, our Pl. XXX.

B 8.* Yi. »In the 5th month, on the day jen-ch'en, T'ung-kung was in 豐 Feng; he ordered Tsê to serve Po Mou-fu. . .». Chengsung 4: 48, Tahi 17.

Of Chung in B 1 it is expressly stated that he was a servant under Wu wang (the graph for Wu is such as could hardly have been invented by a forger in Sung time). The same Chung (full name Nan-kung Chung) recurs in B 6 and also in B 5. In the latter he is combined with Po Mou-fu, who recurs in B 2, B 3, B 4, B 8. In B 8 Po Mou-fu is combined with T'ung-kung, and Feng, a city of Western Chou in Shensi is mentioned. The same T'ung-kung recurs in B 7, and when thus B 7 is incorporated in a group from the very beginning of the dynasty, it is but natural to take the Chou-kung there to mean the Chou-kung Tan, brother of Wu wang.

For the connection of some of these vessels the occurrence of the simple name Chung is certainly not conclusive; but since the script type in them all is decidedly very early, and the vessels of the group thus have to be placed in the beginning of the dynasty, it is but natural to take their Chung to be one and the same person; Wu and Kuo both have done so. There are two more inscriptions

about Chung. One (Po 6: 32) is on a Chï, which is certainly spurious, one (Sie 16: 172) is made up in imitation of B 6; we leave both out of consideration.

B 9—11 form a group:

B 9. Kuei. »The King attacked the prince of 楚 Ch'u: 周 公 Chou kung instructed 禽 K'in to act as prayer master. . .». Kün 2/3: 22, Tahi 10, drawing Shïliu 2: 3, our Pl. XXXI.

B 10. Ting. »Ting of the great prayer-master K'in». Kün 1/2: 47, drawing Shïliu 1: 15.

B 11.* Ting. Same inscriptions as B 9. Chengsung 3: 18.

Since Chou-kung occurs together with K'in, the Chinese scholars seem justified in thinking of 伯 禽 Po K'in, the son of the famous Chou-kung Tan, and to date these bronzes to the time of Ch'eng wang. Here again the script type is very early.

B 12. Ting. »Ch'eng wang made a great . . . . . in 宗 周 Tsung Chou, and gave to 獻 侯 Hien hou (the prince of Hien) . . .». Chengsung 3: 15, Tahi 27, photo Paoyün 8, also drawing Süyi 1: 6.

Tsung Chou always means a Western city in the Shensi plain, in contradistinction to 成 周 Ch'eng Chou in Honan. That this is so has been recognized by all Chinese scholars and it follows from various inscriptions in which the two stand antithetically.

That Ch'eng wang was so named already in his life-time, and that this honorific name is thus no posthumous title, may seem astonishing. Wang Kuo-wei, however, has proved (Kuan t'ang tsi lin k. 18) that the early Chou kings had their honorific names even in their life time. This inscription therefore in all probability dates from Ch'eng wang's reign. The script type is very early.

B 13—16 form a group:

B 13. Kuei. »In the 3rd month, the King solemnly ordered 榮 Jung and the *nei-shï* and said. . . . . 井 (=邢) 侯 Hing hou (the prince of Hing) has submitted. . . ; . . 天 子 the Son of Heaven . . . ; . . . have investiture in 有 周 the house of Chou . . . ; . . . has made the vessel of 周 公 Chou-kung.» Chengsung 4: 48, Tahi 121, photo Eumorfopoulos 1: 26.

B 14. Tsun. »The King ordered the chief, 井 侯 Hing hou . . . ; . . the prince had audience in Tsung Chou . . . ; . . . the King sojourned in 旁 京 P'ang king . . . ; . . . the grace of the Son of Heaven . . . ; the prince gave a brevet to 麥 Mai. . .». Tahi 39, drawing Kukien 8: 33.

B 15. Ho. 井 侯 Hing hou glorified his actions; 麥 Mai. . .». Chengsung 8: 43, photo Senoku II: 101, also drawing Kukien 31: 31.

B 16. Yi. »In the 8th month, on the day yi-hai, a solemn order was given to Hing hou to glorify his ruling actions. . .». Kukien 13: 10, drawing *ibid.*

B 13 is the famous Kuei of the Eumorfopoulos collection. Kuo Mo-jo (Tahi 121) has placed it quite erroneously, in the reign of Li wang, but in his Ta hi t'u lu he has corrected this and moved it up to the early part of the dynasty, in connection with B 12. Indeed, the script in our group B 13—16 is of a very early type and must be attributed to the very beginning of the Chou era. The

井 in the 井 侯 of the present inscriptions is in all probability a quite different thing from the 井 Tsing of 井 伯 Tsing po, 井 叔 Tsing shu etc. in other inscriptions to follow below (this Tsing being a place in the original Cheng of the Shensi plain). Since 井 侯 here is combined with 周 公 Chou kung, Sü Chung-shu (Ac. Sin. Bull. III: 2) and Kuo (Tahi 41) are quite justified in reading it 邢 Hing and quoting Tso chuan, Hi 24: »Fan, Tsiang, 邢 Hing, Mao, Tsu and Tsi are the [states of] the descendants of Chou kung»; the combination of Hing hou with Chou kung and the early type of the script make it very probable that it is here a question of *the* Chou kung (Tan, brother of Wu wang), and that the Hing hou here mentioned is his grandson; the vessels therefore may date from K'ang wang's reign.

In B 14 we have, together with Tsung Chou, one of the Shensi residences of the Western Chou, another residence P'ang king, which, whenever it occurs in inscriptions, unfailingly indicates Western Chou (1122—771). Its position has been much discussed; Wang Kuo-wei places it in Shansi, others identify it with 豐 Feng. T'ang Lan (in a long article in the Shï hüe lun ts'ung of the Pei king Ta hüe) places it to the North of Tsung Chou. That it was situated in Shensi is practically certain.

That B 15 belongs together with B 14 follows from the fact that both have Mai as well as Hing hou. B 16 has almost the same terminology as B 15 and must be connected with it.

A word should be added about the term *t'ien-tsï* 'Son of Heaven'. The *wang* 'king' was never styled *t'ien-tsï* in Yin time. In the thousands of oracle bone inscriptions which speak of the King, he is always plainly called *wang*. In the authentic Shu king chapters of Yin time, the term *t'ien-tsï* never occurs. Hence, when we find it in bronze inscriptions, it is a sure indication that we have a reference to the King of Chou. It is very common in the inscriptions of Western Chou time.

B 17—20 form a group:

B 17. Ting. »In the 9th month, the King was in Tsung Chou; he gave a solemn order (investiture) to 盂 Yü; . . . the illustrious Wen wang; . . . Wu wang . . . ; the King's 23rd year.» K'i 2: 35, Tahi 32, drawing Heng 9.

B 18. Yu. »兮 公 Hi kung gave 盂 Yü aromatic wine. .». Chengsung, Pu chung 12, photo Tahi t'ulu 167.

B 19.* Ting. »In the 8th month, 3rd quarter . . . the King went to the Chou temple . . . 盂 Yü saluted and bowed down the head; . . . used a victim and sacrificed to 周 王 Chou wang, ○ 王 X wang and 成 王 Ch'eng wang; . . . in the King's 25th year.» Kün 3/3: 42, Tahi 35.

B 20.* Tsüe. »When the King first hastened to Ch'eng Chou, he ordered Yü. . .». K'i 7: 30, Tahi 38.

B 17 and B 19 were found together in the beginning of Tao-kuang's reign in Mei hien, Shensi, and it must be a question of the same Yü in both. B 19 gives a clue to the date: the three kings sacrificed to must be Wen wang, Wu

wang and Ch'eng wang; since the script is very early (in B 17 Wen and Wu have the extra radical 96, and the ductus is primitive), it stands to reason that it is a question of the reign next to Ch'eng wang's, and it is a legitimate conclusion that the vessels were made in K'ang wang's 23rd (B 17) and 25th (B 19) years respectively (B. C. 1056 and 1054).

Whether the Yü of B 18 and B 20 is the same person as in B 17 and B 19 is of course less sure; but since the writing is decidedly early, it is reasonable to place them here.

B 21. Chung. ». . . came to meet 邵 王 Chao wang; Southern I Barbarians and Eastern I Barbarians came to audience, 26 states; . . . made the precious bell of Tsung Chou.» Kün 3/2: 56, Tahi 46, drawing Kukien 36: 4.

That this Chao wang is identical with 昭 Chao wang is generally accepted by the Chinese scholars.

B 22—34 form a group:

B 22. Kuei. »The King went and attacked the prince of 楚 Ch'u . . . ; . . in the 9th month, 4th quarter, on the day ting-ch'ou, he gave a brevet to 夨 令 Nie Ling. . . ; . . 姜 the Lady Kiang, consort of the King. . .». Chengsung 6: 11, Tahi 4, photo Umehara I: 2, our Pl. XVI, Weill collection.

B 23. Yi. »In the 8th month, on the day kia-shen, the King ordered 明 保 Ming-pao, son of Chou kung . . . ; . . he ordered 夨 Nie to report in the temple of Chou kung; in the 10th month, 1st quarter, on the day kuei-wei, 明 公 Ming kung went to audience in Ch'eng Chou . . . ; . . . he used a victim in 康 宮 the temple of K'ang wang; . . . 令 Ling presumes to. . .». Chengsung 4: 49, Tahi 6, photo Umehara I: 10, Freer Gallery of Art.

B 24. Yi. Same inscription as the preceding. Photo Umehara I: 11, our Pl. XVIII, Freer Gallery of Art.

B 25. Tsun. Same inscription as B 23. Chengsung 7: 19, rubbing Yen king hüe pao 9, drawing Shan 4: 93, our Pl. XXXII.

B 26. Yu. »The year when Ming-pao made a Yin sacrifice in Ch'eng Chou. . .». Chengsung 8: 29, Tahi 8, drawing Shan 4: 34.

B 27. Kuei. »The King ordered Ming-kung . . . to attack the Eastern regions . . . the prince of 魯 Lu. . .». Chengsung 7: 17, Tahi 9, drawing Kukien 13: 8.

B 28.* Kuei. The King attacked 彔 子 Lu-tsï X; . . . the King gave an order to make a war expedition to the 太 保 T'ai-pao. . .». Kün 2/3: 82, Tahi 22.

B 29.* Ting. »In the year when the prince the T'ai-pao came and attacked the rebellious I Barbarians, in the 12th month, ... the prince presented 旅 Lü cowries. . .». Kün 2/3: 80, Tahi 23.

B 30. Yu. »In the year when the King made a great Yo sacrifice in Tsung Chou, he went and resided in P'ang king; in the 5th month, 3rd quarter, on the day sin-yu . . . ; . . . in Ch'eng Chou; . . . 臣 辰 Ch'en-Ch'en was breveted. . .». Chengsung, Sü chung 23, Tahi 27, drawing Shan 4: 37, our Pl. XXXII.

B 31. Tsun. Same inscription as B 30. Photo Hakkaku 4, our Pl. XXII.

B 32. Ho. Same inscription as B 30. Chengsung 8: 43, drawing Shan 9: 33, our Pl. X.

B 33. Ting. »Kung Ts'ï cast Wu wang's and Ch'eng wang's sacrificial tripod (tripods?); in the 3rd month, 2nd quarter, on the day ki-ch'ou, the prince made a gift and gave a brevet to 大 Ta. . .». Chengsung 3: 25, Tahi 30, drawing Shan 3: 11.

B 34. Kuei. »In the 9th month, 1st quarter, on the day mou-sü, the King was in 夨 Nie's ancestral temple; the Lady 姜 Kiang, consort of the King, presented. . .». Sükia 6: 34, drawing *ibid.*

The six vessels B 22—27 are connected through the name Ming-pao or Ming kung (Prince Ming) — that these are one and the same name follows from B 23 — which occurs in B 23, 24, 25, 26, 27, and Nie Ling, which occurs in B 22 and 23. B 22—25 were found together in Lo-yang. There is a whole recent literature about these vessels. Whereas Kuo Mo-jo identifies Ming-pao (Ming kung) with Po K'in, B 9—11 above), son of Chou kung, and dates the inscriptions in Ch'eng wang's time (so also Sü Chung-shu in Bull. Ac. Sin. III: 2), Wu K'i-ch'ang (Yen king hüe pao 9) takes him to be a younger brother of Po K'in and places the vessels much later, in Chao wang's time. There have been many speculations whether Ming-pao is a name or *pao* is an abbreviation of T'ai-pao »Grand Guardian», title of a court dignitary; those who advocate the latter alternative add several other vessels, referring to a T'ai-pao, to this same group. It seems likely that at least two of them (B 28 and B 29 — is the person Lü of the latter the same as in B 5 above?), which refer to an expedition against these very I Barbarians figuring in B 27, really belong here. In any case we had better concentrate upon two points:

On the one hand, the group cannot be placed earlier than Chao wang, since K'ang kung, the temple of K'ang wang, is mentioned in B 23. There has been much discussion whether 成 宮 Ch'eng kung, 康 宮 K'ang kung, 穆 宮 Mu kung etc. in the bronze inscriptions really mean the temples built to the spirits of Ch'eng wang, K'ang wang, Mu wang etc., or the terms have another significance. Liu Sin-yüan (K'i 9: 14) vindicates that in combinations like K'ang Chao kung, the word K'ang is simply honorific, whereas K'ang kung alone means the temple of K'ang wang. Sü Chung-shu (*loc. cit.*) denies altogether the connection of these temple names with the names of the kings, and Kuo Mo-jo seems to share his opinion. But Wu K'i-ch'ang (Yen king hüe pao 9 and T'u shu kuan kuan k'an 6, p. 500 ff.) furnishes such a crushing weight of concrete examples proving that they are really the posthumous temples of the kings, (Liu Tsie, T'u shu kuan kuan k'an 6, in a review of Kuo's Tahi, agrees with Wu), that his thesis must be said to be proved. Nobody could be justified in placing an inscription like B 23, containing the words K'ang kung (temple of K'ang wang), earlier than Chao wang.

On the other hand, the ductus of the script in all these inscriptions is so decidedly early that there is really no reason to think of another Chou kung, prince of Chou, than the famous first one, brother of Wu wang, who lived a few years into the reign of K'ang wang. A son of his: »Chou kung tsï Ming-pao», may very well have existed in Chao wang's time and sacrificed in the temple of K'ang wang.

Let us sum up: All Chinese critics consider these vessels, which have been

unearthed recently and are universally recognized as being authentic, to belong to the earliest part of the dynasty (an additional support for this is furnished by B 33). Those who date them in Ch'eng wang's reign expose themselves to a great difficulty from the term K'ang kung. Therefore those who place them in Chao wang's reign are surely right.

The three vessels B 30—32 were found together with the Nie Ling bronzes (22—25 above); since their script type is very early, there is every reason to consider them contemporary with the Nie Ling vessels. For Tsung Chou and P'ang king, both indicating Western Chou, see above.

The tripod B 33 was also found together with the Nie Ling vessels (B 22—25) and like those its inscription has at the end the picture of a bird and two 册 *ts'ê*. The hand of the script is the same; they are obviously of the same date. We have seen that the Nie Ling series in all probability belongs to Chao wang's reign. Here we have a tripod cast for sacrifices to Wu wang and Ch'eng wang, the 1st and 2nd kings. The vessel should reasonably be little posterior to them, and Chao wang, the 4th king, will fit in very nicely.

As to B 34, its connection with this series is less certain. But since the name Nie is the same as in the Nie Ling vessels, and the queen was a lady Kiang, just as in B 22, Wu K'i-ch'ang is probably right in placing this tripod under Chao wang together with the other Nie series.

B 35—40 form a group:

B 35. Yu. »In the 4th month, 1st quarter, on the day kia-wu, the King went sightseeing in Ch'ang; the prince 東 宮 Tung-kung . . . ; 效 Hiao does not presume to . . .». K'i 6: 15, Tahi 88, drawing Ch'angan 1: 17, rubbing I shu 26.

B 36. Tsun. Same inscription as B 35. Photo Hakkaku 9, our Pl. XXI.

B 37. Kuei. ». . . the year when the King ordered Tung-kung to pursue with the Sixth army. .». Tahi 89, drawing Kukien 27: 30.

B 38. Kuei. »休 王 The gracious King presented 效 父 Hiao-fu cowries. . .». K'i 17: 13, Tahi 80, drawing Huaimi, Shang 22.

B 39. Ting. 休 王 The gracious King presented X-fu cowries. . .». K'ia 6: 12, drawing Kukien 3: 25 (placed here because it is obviously written by the same scribe as the preceding).

B 40.* Ting. »In the King's 1st year, 6th month, 3rd quarter, on the day yi-hai, the King was in the great . . . of Mu wang of Chou; the King said thus: 曶 Hu, I order you . . . ; 井 叔 Tsing-shu gave Hu . . . ; 效 父 Hiao-fu . . . . ; Hu made the tripod of his deceased father . . . ; Hu, by aid of K'uang Ki reported to 東 宮 Tungkung. .». K'i 2: 21, Tahi 80.

The inscriptions of B 35—38 are connected by the names Tung-kung and Hiao-fu. Kuo Mo-jo places them in Hiao wang's reign (909—895), because he identifies 休 王 *hiu wang* with 孝 王 Hiao wang; this is a guess without the slightest foundation. For the dating of these vessels we have two points d'appui. On the one hand, they are certainly connected with B 40, the Hu Ting, on which we have both Tung-kung and Hiao-fu. The missing character after the word *t'ai* in that inscription we certainly have to fill out by *shi* 'room', as in dozens

of other inscriptions, and it means »in the Great Room of the temple of Mu wang». On the other hand, they have a script which is clearly of the early type. In B 40 therefore *yüan nien* »the 1st year» must refer to Mu wang's successor Kung wang, and the date be 946 B. C.; the other inscriptions of the group are slightly older than this and fall in the reign of Mu wang.

The inscriptions B 1—40 have been attributable to particular reigns of the early period (1122—947). The following: B 41—77, are only in a general way attributable to the same period because of their script type.

B 41. P'an. »延 Yen has made for 周公 Chou kung.» Chengsung, Pu shang 21, photo Eumorfopoulos I: 47, our Pl. XVI.

The Chou kung is ambiguous; but the script type indicates one of the early Chou reigns.

B 42. Kuei. »In the 9th month, 3rd quarter, on the day keng-yin, Hien-po . . . . . in 畢公 Pi kung's (the prince's of Pi) house . . . ; . . received grace from the Son of Heaven. . .». Photo Mengwei, Shang 25, our Pl. XI.

Kuo Mo-jo in Ku tai ming k'o huei k'ao identifies the prince of Pi with the one in the chapter Ku ming of the Shu king, who must have lived in Ch'eng wang's and K'ang wang's time. There is really no support for this. Yet the script is decidedly very early.

B 43—46 form a group:

B 43. Yu. »伯屖父 Po Ch'ï-fu (we read Ch'ï and not Si because of B 46) with the 成 Ch'eng army went East and was ordered to attack the Southern I Barbarians; in the 1st month, 2nd quarter, on the day sin-ch'ou, he was in P'ei; . . . 競 King had his merits reviewed.» (There are various interpretations of the phrase *mie li* (*han*?), of which I consider »to review the merits of» to be the most likely). Chengsung, Pu shang 12, Tahi 55, photo Senoku II: 63.

B 44. Kuei. »In the 12th month, 3rd quarter, on the day jen-wu, Po Ch'ï-fu (as in 43) bestowed grace upon X. . .». K'i 17: 17, Tahi 57, drawing Shan 8: 50, also Sükia 6: 26.

B 45. Kuei. »In the 6th month, 4th quarter, on the day jen-shen, Po Ch'ï-fu (as in 43) reviewed the merits of 競 King. . .». Chengsung 5: 40, Tahi 56, photo Tahi t'ulu 64.

B 46.* Ting. »伯屖父 Po Ch'ï-fu made the . . . tripod». Kün 1/3: 42.

The name Po Ch'ï-fu occurs in B 43—46, King in B 43 and 45. Kuo's theory that Ch'ï is equal to 辟 P'i is vetoed by B 46; therefore also his rather wild speculation that Po Ch'ï-fu should be identical with the Shï Yung-fu of B 47 below (辟雍!). The script of the group is early.

B 47—54 form a group:

B 47. Tsun. »In the 13th month, 2nd quarter, on the day ting-mao, Kien followed 師雝父 Shï Yung-fu and kept guard in the X camp. . .». K'i 17: 7, Tahi 51, drawing Lianglei 3: 14.

B 48. Hien. »In the 6th month, 4th quarter, on the day ping-yin, Shï Yung-fu kept guard in the 古師 Ancient Camp; Yü served with 𤞷侯 the prince of X. .». Chengsung 4: 21, Tahi 51, photo Senoku I: 12.

B 49. Ting. »In the 11th month Shï Yung-fu . . . came to 𤞷 X. .». K'ia 6: 11, Tahi 52, photo Mengwei, Sü 6, our Pl. IV.

B 50. Yu. »X followed Shï Yung-fu and kept guard in the Ancient Camp. .». Kün 3/1: 15, Tahi 52, drawing Po 10: 32.

B 51. Yu. »The King ordered 𢦚 Tung and said: The I Barbarians of the 淮 Huai dare to attack the inner states: you with the officers of the Ch'eng Chou camp shall keep guard at the Ancient Camp; 伯雝父 Po Yung-fu reviewed the merits of 彔 Lu. . .». Tahi 53, drawing T'ao 2: 39.

B 52. Chï. Same inscription as B 51. Drawing Shan 4: 91.

B 53. Kuei. »When Po Yung-fu came from 𤞷 X, he reviewed the merits of Lu and presented. . .». Tahi 54, photo Senoku II: 105.

B 54.* Kuei. »In the King's 1st month, on the day keng-yin, the King said thus: 彔伯𢦚 Lu po Tung . . . ; . . . achieved merits in the state of Chou; . . . the Son of Heaven. . .». K'i 4: 16, Tahi 54.

That Shï Yung-fu and Po Yung-fu is the same person follows from the identity of place names in B 48, 49, 50, 51, 53. Lu po Tung of B 54 is obviously the same person as in B 51 and 53. The script of the group is of the early type, but there is no possibility of a precise attribution to any particular reign. Have the Lu vessels here anything to do with the Lu-tsï X of B 28 above?

B 55. Ting. »In the 12th month, 1st quarter, on the day ping-wu, the King was in 周新宮 the New Temple of Chou . . . . 師湯父 Shï T'ang-fu saluted. . .». K'ia 4: 28, Tahi 66, drawing Ch'angan 1: 6, also Shan 2: 80.

Kuo wants to date this vessel in Kung wang's time, because B 83 below has the phrase: Kung wang was in the *Sin kung* New Temple; but there is of course nothing to show that this Sin kung had not existed and got its name under an earlier king. Because of the script we can hardly place the vessel later than Mu wang.

B 56—59 form a group:

B 56. Ting. »The King ordered 遣 K'ien to vanquish the rebellious I of the East; Ch'ï followed K'ien on his expedition. . .». K'i 16: 5, Tahi 12, drawing Shïliu 1: 17.

B 57. Tsun. »When the King went on a war expedition to the South and was in 厈 Han. . .». (The last character is only in part discernible, but has probably to be filled out so). Kukien 8: 43, drawing *ibid.*

B 58.* Tsun. »In the 13th month, on the day sin-mao, when the King was in Han, he presented to K'ien . . . ; . . . made the precious vessel of the Lady 姞 Ki.» Chengsung 7: 19, Tahi 12.

B 59.* Yu. »In the 19th year, when the King was in Han, 王姜 the Lady Kiang, consort of the King, ordered to make a brevet for K'iung. .». K'ia 19: 22, Tahi 11.

The vessels of this group are connected by the names K'ien (B 56 and 58) and Han (B 57, 58, 59). Since it is a question of a big expedition to the East and South (cf. B 22, 27, 29) and since there is a Lady Kiang, consort of the King (cf. B 22), and since finally the script type is very early, it is tempting to place these vessels along with the Nie Ling vessels (B 22 ff.) in Chao wang's reign.

B 60—61 belong together:

B 60. Ting. »In the 22nd year, 4th month, 3rd quarter, on the day ki-yu, the King sojourned in the 豐宮 Feng Temple. . . ; on the day ting-sï the King reviewed the merits of 庚嬴 Keng Ying. . .». Tahi 45, drawing Kukien 3: 39.

B 61. Yu. »In the King's 10th month, 3rd quarter, on the day ki-ch'ou, the King went to *Keng Ying kung* the ancestral temple of Keng Ying; he gave cowries, ten strings. . .». K'ia 19: 3, Tahi 44, drawing Lianglei 6: 1.

Both Kuo Mo-jo and Wu K'i-ch'ang place these vessels in K'ang wang's reign, because in Tso chuan (Chao 4) it is said: »*K'ang yu Feng kung* K'ang wang had the Feng temple.» This, of course, is in no way conclusive, for the Feng kung may have lasted long after K'ang wang. Moreover the character is so badly drawn in the Kukien that it is very questionable whether it can be read Feng. The script of B 61 is early rather than late.

B 62—63 belong together:

B 62. Ting. »In the year when the King went to Ch'eng Chou, he amply rewarded 趠 Ch'o and made a gift to 溓公 Lien kung . . .». K'i 2: 5, Tahi 24, drawing Tahi t'ulu 50.

B 63.* Ting. »When the King attacked the I Barbarians of the East, Lien kung (as in 62) ordered. . .». Chengsung, Pu shang 12, Tahi 24.

The script is very early, and the war mentioned must be one of the big expeditions of the early reigns.

B 64. Ting. »The set of tripods of 毛公 Mao kung (the prince of Mao).» K'i 2: 51, ill. I shu 8. The sense of the frequently occurring 旅 (sometimes, as here, with an additional rad. 車) is doubtful: 'travelling tripod'? 'tripod used for *lü* sacrifices'? We consider the sense of »series» to be the most probable: »set of tripods» etc.

This Mao kung has nothing whatever to do with the famous Mao kung Yin of B 143 below. The script type is entirely different and indicates a considerable difference of epoch. B 64 must be very early in the dynasty. We place it in the cat. B, because the princes of Mao were connected with the Royal court.

B 65. Ting. »In the 1st month, the King was in Ch'eng Chou; he ordered the *siao-ch'en* 夌 Ling to make for the Lady 妘 Youngest Sister Yün. . .». K'i 16: 7, drawing Po 2: 14.

In this inscription, Wu K'i-ch'ang reads certain place names so as to connect the vessel with certain others dated by him in Chao wang's reign. This seems to us too uncertain. In any case the script is very early.

B 66. Kuei. »In the 1st month, 1st quarter, on the day kuei sï, the King was in Ch'eng Chou; 格伯 Ko po. . .». K'i 16: 36, Tahi 75, photo Mengwei, Shang 33, also drawing Huaimi, Hia 28.

There were five vessels with this inscription. Kuo places them in Kung wang's reign on quite flimsy grounds. The script, though not very early, is clearly older than that of the inscriptions with which Kuo combines it, and certainly from the first half of Western Chou. Ko po probably does not mean »Prince of Ko»

but is a name: »Eldest brother from Ko», since there is a Ko chung »Second brother from Ko» in an inscription Kün 2/3: 37.

Of the following inscriptions, B 67, 69, 71, 72, 74, 75, 76, 77 have a very early script type. In 68, 70, 73 the script, without being very early, is still undoubtedly from the first half rather than from the second half of Western Chou:

B 67. Ting. »On the day yi-hai, when the King had been in the X camp . . . : he returned to 雒 Lo, and made a gift of cowries . . .». K'i 2: 4, drawing Heng 4.

B 68. Li. »戒 Kie made the brilliant vessel for the residence in P'ang. . .» Chengsung 4: 5, drawing Shan 3: 19. (For P'ang see B 14 above).

B 69. Yu. »In the 1st month, on the day ting-ch'ou, the King went to 吕 Lü. . . : the King made a *lao* sacrifice. . . ; 貉子 Mo-tsï signalled the King's grace. . .». K'i 6: 14, ill. I shu 26, also drawing Kukien 15: 9.

B 70. Yu. »In the 1st month, on the day kia-wu, the King was in Cheng(?); . . . . 農 Nung saluted thrice and bowed down the head and now presumes to signal the King's grace. . .». K'i 6: 15, ill. I shu 26, also drawing Kukien 15: 13.

B 71. Ting. ». . . . . the King sojourned in Chou, and gave cowries, five strings. .». K'i 2: 3, drawing Heng 3, also T'ao 1: 24.

B 72.* Kuei. Same inscription as B 71. K'ia 12: 11.

B 73. Ting. »The chief ordered 史獸 the scribe Shou to achieve merit in Ch'eng Chou. . .». Chengsung 3: 29; photo Shuangyü 7, also drawing Shan 2: 79.

B 74. Ting. »When 匽侯 the prince of Yen first had audience in Tsung Chou, the King gave 旨 Chï cowries. . .». Chengsung 3: 16, photo Senoku I: 2. Cf. C 186 below.

B 75. Ting. »The prince of Yen, Chï (as in B 74), has made. . .». K'ia 6: 2, drawing Heng 16, also P'anku, Hia 14.

B 76. Ting. »On the day kuei-hai, the King moved to the new clan temple in X; . . . the Son of Heaven gave 柬 Kien big cowries. . .». Po 2: 26, drawing *ibid.*

B 77. Kuei. »X po (the prince of X) followed the King in attacking the rebellious 荆 King. . .». Chou kin wen ts'un 3: 109, photo Mengwei 1: 24.

King is the same as 楚 Ch'u, and Wu K'i-ch'ang combines this inscription with the great expeditions against Ch'u in Chao wang's reign. In any case the script type places the vessel in the early part of the dynasty.

II. *Inscriptions from the second half (946—771) of Western Chou.*

B 78—86 form a group:

B 78. Ting. »In the 6th month, 2nd quarter, on the day keng-yin, the King went to the Great Room; 司馬井伯 the *sï-ma* Tsing po assisted 師奎父 Shi Kuang(?) -fu . . . ; . . . the Son of Heaven. . .». K'ia 4: 26, Tahi 70, drawing Heng 13, also Ch'angan 1: 5.

B 79. Kuei. »In the King's 12th year, 3rd month, 3rd quarter, on the day keng-yin, the King was in Chou, and went to the Great Room and ascended the throne; the *sï-ma* Tsing po assisted 徒 T'u. . .». Tahi 71, drawing Sükia 12: 44. (Both Kuo and Wu erroneously read 走 Tsou for T'u and identify this Tsou with the Tsou of a Chung bell in Po 22: 22, with which it has nothing to do).

B 80. Kuei. »In the King's 7th year, 13th month, 2nd quarter, on the day kia-yin, the King was in Chou, and was in the ancestral temple of Shï Siu; . . . entered and

assisted 牧 Mu . . . ; the King called 內史吳 the *nei-shï* Wu. . .». Tahi 67, drawing K'ao 3: 24.

B 81. Kuei. »In the 6th month, 2nd quarter, on the day mou-sü, in the morning, the King went to the Great Room; 師毛父 Shï Mao-fu took his place of honour, Tsing po assisted. . .». Tahi 69, drawing Po 17: 16.

B 82.* Kuei. »In the 1st year, 6th month, 3rd quarter, on the day kia-sü, the King was in the residence of Tu; he went to the Great Room; Tsing po assisted 師虎 Shï Hu . . . ; the King called the *nei-shï* Wu . . : . . . the Son of Heaven. . .». K'ia 11: 7, Tahi 60.

B 83.* Ting. »In the 15th year, 5th month, 2nd quarter, on the day jen-wu, 龏王 Kung wang was in Chou, in the 新宮 New Temple . . . : 史趞曹 the scribe Ts'io Ts'ao was given . . . ; Ts'io Ts'ao saluted and bowed down the head, and now presumes to signal the grace of the Son of Heaven. . .». Chengsung 3: 31, Tahi 59.

B 84.* Ting. »In the 7th year, 10th month, 2nd quarter, the King was in Chou, in the 般宮 Pan temple; in the morning, the King went to the Great Room; Tsing po assisted Ts'io Ts'ao . . . ; . . . the Son of Heaven. . .». Chengsung 3: 30, Tahi 59.

B 85.* Ting. »In the King's 9th month, on the day ting-hai, the King sojourned in the Pan temple (as in B 84); Tsing po entered and assisted 利 Li . . . ; . . . the Son of Heaven. . .». Chengsung 3: 33, Tahi 72.

B 86.* Kuei. »In the King's 2nd month, 2nd quarter, on the day mou-yin, the King went to the Great Room of the ancestral temple of 師戲 Shï Hi; Tsing po entered and assisted 豆閉 Tou Pi; the Son of Heaven . . . : therefore I have made my fine father 釐叔 Li Shu's precious vessel.» K'i 4: 15, Tahi 69.

One of these inscriptions is directly dated: 龏 and 恭 are used promiscue in the inscriptions, and B 83 is therefore made in the 15th year of Kung wang. According to the orthodox chronology Kung wang reigned 946—935, which admits of no »15th year». But the Ti wang shï ki gives him a reign of 20 years (see p. 27 above), so B 83 has to be dated round about 932 B. C. B 83 concerns a person Ts'io Ts'ao, who recurs in B 84, there »assisted» by the ceremony master Tsing po. This Tsing po, sometimes styled the *sï-ma* Tsing po, connects the whole series of inscriptions of this group; he occurs in B 78, 79, 81, 82, 84, 85, 86. Again B 80 is connected with this series by a person, the *nei-shï* Wu, who recurs in B 82. It might seem questionable whether the Tsing po is really one and the same person and the inscriptions really belong together. Tsing po does not mean »prince of Tsing», for we have also 井叔 Tsing shu and 井季 Tsing ki, so 伯 *po* is simply »eldest brother». Tsing was a place in Cheng, see Shuo wen kie tsï under 郱 Tsing (the reading Tsing of Kuang yün and Yü p'ien is preferable to the reading Hing). It has to be distinguished from 邢 Hing, the *hou* prince of which has figured in inscr. B 13 above. Now Tsing po »Eldest brother from Tsing» might be a name carried by various persons, just like 虢仲 Kuo chung »Second brother from Kuo» (see p. 51). We also have several Tsing shu »Third brother from Tsing» (see p. 52). But here we believe it is really a question of one and the same Tsing po, for the script is very similar in the whole series and is very likely from one and the same hand; the only exception is B 82, which is somewhat more stiff and different from the

others — it is certainly written by another hand. But its *nei-shï* Wu connects it quite definitely with B 80 and thus with our group. Moreover all these inscriptions are very analogous in formulation, and there are occasional other similarities of detail (e. g. Pan kung in both B 84 and 85), which makes it quite certain that they all belong together.

B 87—97 form a group:

B 87. Ting. »克 K'o said: very august was my grandfather (ancestor?) 師華父 Shï Hua-fu . . . : . . . he could reverently protect his chief 龏王 Kung wang . . . : the King was in Tsung Chou; the King went to the temple of Mu [wang] . . . ; 緟季 Ch'ung ki assisted 善夫克 the *shan-fu* K'o . . .». K'i 2: 28, Tahi 125, drawing Tahi t'ulu 16.

B 88. Ting. »In the King's 23rd year, 9th month, the King was in Tsung Chou; the King ordered the *shan-fu* K'o to transmit his orders to Ch'eng Chou;. . . I, K'o, have made my august grandfather (ancestor?) 釐季 Li ki's precious vessel. . .». Chengsung 3: 34, Tahi 128; drawings (three vessels) T'ao 1: 34—38, our Pl. XLIX. These were found (a series of 7 vessels) in K'i shan hien of Shensi. Here the *shan-fu* K'o calls his grandfather Li ki, in B 87 he calls him Shï Hua-fu; as Kuo points out, the former is a *ming* personal name proper, the latter a *tsï* honorary name.

B 89. Kuei. »In the 13th year, 1st month, 1st quarter, on the day jen-yin, the King made an expedition against the I Barbarians of the South: . . . I, 無㠱 Wu Ki, have made my august grandfather 釐季 Li ki's vessel. . .». Chengsung 6: 3, Tahi 120, photo Mengwei, Shang 31, our Pl. XLI; also drawing of lid Shan 8: 87.

B 90. Sü. In the 18th year, 12th month, 1st quarter, on the day keng-yin, the King was in Chou, in K'ang wang's and Mu wang's temple; The King ordered 尹 Yin to assist 史㳄 the scribe Yin to give a deed of gift to the *shan-fu* K'o; . . . the Son of Heaven. . .». K'ia 15: 18, Tahi 127, photo Umehara II: 122, our Pl. XXXVIII, Buckingham collection.

B 91. Sü. »In the King's 25th year, . . . in the ancestral temple of 師田 Shï T'ien; . . . the *shan-fu* K'o; I, 鬲从 Kuo Ts'ung have made my august grandfather 丁公 Ting kung's and my illustrious father 惠公 Huei kung's vessel.» Chengsung 6: 44, Tahi 130, ill. Chengts'iu 22.

B 92. Kuei. »In the King's 27th year, 1st month, 3rd quarter, on the day ting-hai, the King was in Chou, in K'ang wang's temple; in the morning the King went to Mu wang's Great Room. . . : Ch'ung ki (as in B 87) assisted 伊 I . . . ; . . . the Son of Heaven. . .». Chengsung 6: 9, Tahi 132; photo Tahi t'ulu 105.

B 93. Ting. »In the 32nd year, 3rd month, 1st quarter, on the day jen-ch'en, the King was in Chou, in K'ang wang's temple, and loitered in the Great Room; Kuo Ts'ung (as in B 91) made a plaint . . . ; . . . 虢旅 Kuo Lü . . . ; I, Ts'ung, have made my august grandfather Ting kung's (as in B 91) and my illustrious father Huei kung's (as in B 91) vessel; may for ten thousand years the sons and grandsons of 鬲攸从 Kuo Yu Ts'ung treasure and use it.» K'i 2: 15, Tahi 133, drawing T'ao 1: 40.

B 94. Chung. »虢叔旅 Kuo shu Lü said: my very illustrious august father 惠叔 Huei shu . . . ; . . . the Son of Heaven. . .». K'i 9: 30, Tahi 136. A set of seven bells were found in Ch'ang-an (Shensi) as related by Wu Ta-ch'eng (K'ia chai tsi ku lu shï wen p. 1). Four of them had the complete inscription of 91 characters; such a one is given in drawing T'ao, Sü 3. Three (of a Pien-chung set) had only part of the inscription; such a one is given in photo Senoku Betsu 9, our Pl. XLVII.

B 95. P'an. This is the famous 散氏 *p'an*, the P'an of the San family. It is full of names of persons and places, and there is a whole literature about its interpreta-

tion; a particularly full commentary is given by Wang Kuo-wei (Kuan t'ang ku kin wen k'ao shï). To us, the salient fact is that among the personages of San (determined by Wang as a state in Shensi), is mentioned 攸從鬲 Yu (Shu?) Ts'ung Kuo, which must necessarily be the same person as Kuo Yu Ts'ung of B 93. K'i 8: 21, Tahi 137, ill. Tahi t'ulu.

B 96. Chung. »In the 16th year, 9th month, 1st quarter, on the day keng-yin, the King was in Chou, in K'ang wang's illustrious temple; the King called 士曶 the officer Hu to summon 克 K'o . . . ; . . . the Son of Heaven. . .». Chengsung 1: 9, Tahi 108, drawing T'ao, Sü shang 8, our Pl. LI. This is the set of six bells found in K'i shan hien, Shensi, mentioned p. 13 above.

B 97.* Ting. »In the 9th month, 1st quarter, on the day keng-yin, Shï Yin (as in B 89) made. . .». Chengsung 3: 22, Tahi 128, note.

There are various points which connect these 11 vessels. First we have the *shan-fu* K'o in B 87, 88, 90, 91; that the K'o of B 96 is the same person is in itself not certain (a monosyllabic name like this proves nothing), since there is not the title *shan-fu;* yet the script is so extremely similar to that of the *shan-fu* K'o vessels, as if by the same hand, that we can venture the combination. Then we have the curious person Kuo Ts'ung or Kuo Yu Ts'ung. That these two forms refer to the same person follows from B 91 and B 93; in B 95 we have the name inverted: Yu Ts'ung Kuo, the character Kuo with a slight variant — that it is still the same name is certain (see Wang Kuo-wei, *loc. cit.*). This person then connects B 91, 93 and 95, and via B 91, which has also *shan-fu* K'o, these are joined to the series above. B 92 is connected with B 87 (the *shan-fu* K'o series) by the person Ch'ung ki. B 89 is connected with B 88 (*shan-fu* K'o series) by the name Grandfather Li ki. B 97 is connected with B 90 (*shan-fu* K'o series) by the name Shï Yin. Finally, that the Kuo shu Lü of B 94 is the same as the Kuo Lü of B 93 (Kuo Yu Ts'ung series) is certain from the fact that we have »august father Huei kung» in B 91 and »august father Huei shu» in B 93.

It should be pointed out that the *shï* Hu of B 96 is not the same as the Hu of B 40 above; it is written differently.

The period to which this series belongs has been determined by Wang Kuo-wei as that of Li wang (878—842); this has been accepted a. o. by Kuo Mo-jo, who says that since Li ki (Shï Hua-fu) served under Kung wang (946—935), his grandson the *shan-fu* K'o must have lived under Ih wang (894—879) and Li wang; and the dates in these inscriptions giving high year figures: B 90 18th year, B 88 23rd year, B 91 25th year, B 92 27th year, B 93 32nd year, it must be a question of Li wang.

Now this is not quite conclusive; for on the one hand we cannot build on the reign list anterior to 841, and on the other hand 祖 *tsu* may mean 'ancestor' just as well as 'grandfather'. We have therefore to reckon also with Süan wang (827—782) as a possibility, a ruler who also had as many as 32 years of reign (Eastern Chou, from 770, is excluded, since various vessels of the group were

found in Shensi). Let us state, therefore, that the series must be at least two generations posterior to Kung wang, say roughly not earlier than 900 B. C., and certainly not later than 796 (32nd year Süan) B. C. In this way we are entirely on the safe side, and have dated it within a century. We can afford to add that in all probability Wang Kuo-wei is right in placing the series under Li wang.

B 98—105 form a group:

B 98. Kuei. »In the 5th year, 1st month, on the day ki-ch'ou, 琱生 Tiao Sheng (Chou sheng?) had service. . . : 召伯虎 Hu, prince of Shao, said. . .». Kün 3/2: 25, Tahi 158; photo Tch'ou X, XI.

B 99. Kuei. »In the King's 1st year, 1st month, 1st quarter, on the day ting-hai, 伯龢父 Po Ho-fu said thus. . .». Tahi 111, drawing Po 16: 27.

B 100. Chung. »井仁佞 Tsing Jen Ning said. . . ; Ning made a big . . . bell for Ho-fu (as in 99). . .». K'i 9: 17, Tahi 166, photo Senoku Betsu 1, also drawing T'ao, Sü shang 1.

B 101. Kuei. »In the 1st year, 5th month, on the day kia-yin, the King was in Chou; he went to K'ang wang's temple; . . . T'ung chung assisted 師兌 Shï Tuei . . . ; 世師龢父 the deceased Shï Ho-fu . . . ; I, Tuei, presume to signal the illustrious good grace of the Son of Heaven, and have made my august grandfather Ch'eng kung's vessel». Chengsung 6: 17, Tahi 173, drawing Shan 8: 93.

B 102. Kuei. »In the 3rd year, 2nd month, 1st quarter, on the day ting-hai, the King was in Chou; he went to the Great temple; X po assisted Shï Tuei (as in 101) . . . ; the King called . . . . . : I have ordered your deceased Shï Ho-fu (as in 101) . . . ; I, Tuei, presume to signal the illustrious grace of the Son of Heaven and have made my august father 釐公 Li kung's . . . vessel.» Chengsung 6: 20, Tahi 174, drawing Shan 8: 95.

B 103. Hu. »In the 1st month, 1st quarter, on the day ting-hai, the King went to Ch'eng wang's temple; 井公 Tsing kung entered and assisted 曶 Hu; . . . Hu saluted and bowed down the head; I, Hu, presume to signal the illustrious good grace and order of the Son of Heaven, and therefore I have made my cultivated father Li kung's (as in 102) vase. . .». Chengsung, Pu shang 39, Tahi 84; drawing Shan 4: 57.

B 104.* Kuei. »In the 6th year, 4th month, on the day kia-tsï, the King was in 蒡 P'ang; 召伯虎 Shao po Hu reported and said . . . : then he gave as a recompense a *pi* jade to Tiao Sheng (as in B 98). . .». K'i 4: 27, Tahi 162.

B 105.* Kuei. »Shï Ho-fu reported to the King; in the 11th year, 9th month, 1st quarter, on the day ting-hai, the King was in Chou; he went to the Great Room . . . ; the steward Tiao Sheng entered. . .». K'ia 9: 17, Tahi 164.

The connecting links between these inscriptions are as follows: Ho-fu, called either Po Ho-fu or Shï Ho-fu (just as Yung-fu was called either Po Yung-fu or Shï Yung-fu in inscr. B 47—54), occurs in B 99, 100, 101, 102, 105. Tiao Sheng and Shao po Hu both occur in both B 98 and 104. Tiao Sheng recurs in B 105, and so connects these two with the Ho-fu series. Shï Tuei further connects B 101 and 102. B 103 has the same name Hu as B 40 above, and hence Kuo dates it together with that inscription, but that is quite erroneous. The script type is very much later. It is dedicated to the same »father Li kung» as B 102, and the script hand is identical; there can be no doubt, to our mind,

that the inscription belongs here. One more Hu (士 shï Hu) in B 96 is probably equally another person, the graph of the name being different.

A date for the series is furnished by the name Shao po Hu, i. e. Hu, prince of Shao. In the Shï king, ode Kiang Han, is mentioned a 召 虎 Shao Hu, and Mao Heng (2nd c. B. C.), in his famous commentary, which embodies a great amount of late Chou lore, identifies this Shao Hu with prince 穆 Mu of Shao, who was a prominent man under both Li wang (878—842) and Süan wang (827—782). »The 5th» and »the 6th» years (B 98 and 104) must therefore refer to 823 and 822 B. C. (or possibly 837 and 836, the 5th and 6th years of the Kung-ho interregnum between Li wang and Süan wang). B 101 and 102 (with 103) must be somewhat later than the rest, since Ho-fu there is spoken of as deceased.

B 106. Kuei. »In the 2nd year, 1st month, 1st quarter, the King was in Chou, in the X temple; on the day ting-hai the King went to the *Süan sie* shooting arena of Süan wang's temple; 毛 伯 Mao po entered...». K'ao 3: 9, drawing *ibid.*

B 107. P'an. »In the 12th year, 1st month, 1st quarter, on the day ting-hai, 虢 季 子 伯 Kuo ki Tsï po made ...; he attacked the Hien yün to the South of the Lo; .. the King went to the temple of Chou, to the shooting arena of Süan wang's temple and there gave a feast...». K'i 8: 15, Tahi 101, drawing Tahi t'ulu 152. This P'an was found in Pao-ki of Mei hien, Shensi.

This P'an is the vessel adduced by Maspero (see p. 11 above) as a typical example of forgery. He reproduces the whole inscription, yet skipping the very line which gives the point d'appui for the dating: that about the *Süan sie*. The sense of *sie* (several graph variants) is a matter for controversy: 'shooting arena', or 'open temple (without closed chambers)', or 'terrace where sacrificial vessels were stored'; but that it is something in an ancestral temple is certain. Kuo Mo-jo denies that 宣 Süan refers to Süan wang, and without any reasons at all dates the vessel in Ih wang's time. But since already Kung-yang chuan (Süan 16th year) clearly indicates that *Süan sie* was in the Süan kung, and since this latter, by analogy with scores of other cases: Ch'eng kung 'temple of Ch'eng wang', K'ang kung 'temple of K'ang wang', Mu kung 'temple of Mu wang' etc. (cf. p. 34 above) must be interpreted as Süan wang's temple, we have to place the inscription after the death of Süan wang. On the other hand, it cannot be of Eastern Chou time, since it was found in Shensi. We have thus to date it in Yu wang's time (781—771). Süan wang had carried on big wars against the Huns (Hien yün), and Yu wang had to continue the hostilities and was badly harassed by the Hien yün. Our inscription evidently refers to one of these encounters.

The inscription B 106 speaks of the same *Süan sie*, and has been placed here tentatively; it is certain that it is later than Süan wang's reign, but nothing proves definitely that it cannot be of Eastern Chou time.

The inscriptions B 78—107 have been attributable to particular reigns or definite periods within the second half (946—771) of Western Chou. The follow-

ing, B 108—152, are only in a general way attributable to the same period because of their late script type:

B 108. Fu. »史 宂 The scribe Jung has made...». K'ia 15: 16, Tahi 98, drawing T'ao, Sü shang 43.

Kuo has identified this Jung (the reading of the name is really quite doubtful; there are many proposals; we have followed the Shuo wen) with the Jung of inscr. B 154 ff. below. This is not conclusive, since the Jung here has another title. On the contrary there is every reason to think that they are two different persons, for the script of our inscription here is decidedly more recent; it belongs to the late period. The inscription here is rimed in typical Chou fashion.

B 109—113 form a group:

B 109. Ting. »In the King's 8th month, on the day ping-wu, the King ordered the prince of X, 伯 晨 Po Ch'en, and said...». K'i 16: 10, drawing Huaimi, Hia 7.

B 110. Kuei. »In the 5th year, 3rd month, 1st quarter, on the day keng-yin, the King was in Chou, in 師 彔 宮 Shï Lu kung (the ancestral temple of Shï Lu?); in the morning the King went to the Great Room...; 司 馬 共 the *sï-ma* Kung assisted 諫 Kien...; the King called 內 史 先 the *nei-shi* Sien...». Tahi 116, drawing T'ao 2: 10.

B 111.* Ting. »In the 3rd year, 3rd month, 1st quarter, on the day kia-sü, the King was in Chou in Shï Lu kung (as in 110); in the morning the King went to the Great Room...; the *sï-ma* Kung assisted Shï Ch'en...;...the Son of Heaven...». Kün 3/2: 21, Tahi 113.

B 112.* Kuei. »In the 3rd year...Great Room (= the preceding); the *sï-ma* Kung assisted 師 俞 Shï Yü...;..the Son of Heaven...». K'ia 9: 17, Tahi 115.

B 113.* Kuei. »In the King's 9th month, 2nd quarter, on the day keng-yin, the King was in Chou, in K'ang wang's temple; in the morning he went to the Great Room...; 司 馬 單 伯 the *sï-ma* the prince of Tan entered and assisted 揚 Yang; the King called the *nei-shï* Sien (as in 110)...;...the Son of Heaven...». K'ia 11: 16, Tahi 117.

In B 109 the person called Po Ch'en is evidently the same as Shï Ch'en in B 111 (just as Po Yung-fu is equal to Shï Yung-fu in B 47—54, and Po Ho-fu is equal to Shï Ho-fu in B 98—105). Sï-ma Kung connects B 110, 111, 112; *nei-shi* Sien connects B 110 and 113. The script of the group is of the late type.

B 114—B 121 form a group:

B 114. Ting. »In the 3rd year, 5th month, on the day ting-sï, the King was in Tsung Chou; he ordered 史 頌 the scribe Sung...; ... to Ch'eng Chou; ... the Son of Heaven...». Chengsung 3: 32, Tahi 63, drawing Heng 14, also P'anku, Shang 10, our Pl. XLIX. There are two tripods, the other being drawn in Kukien 3: 21.

B 115. Kuei. Same inscription as B 114. Chengsung 6: 5; there was a series of Kuei vessels, drawings in Heng 27, Lianglei 6: 35 (lid), Kukien 27: 16.

B 116. Ting. »In the 3rd year, 5th month, 4th quarter, on the day kia-sü, the King was in Chou, in K'ang wang's and Chao wang's temple. In the morning the King went to the Great Room and ascended the throne; the steward 弘 Hung assisted 頌 Sung...;...the Son of Heaven...». Chengsung 3: 36, Tahi 64; drawings (there were two vessels) Sükia 1: 28, 1: 31, our Pl. XXXV.

B 117. Kuei. Same inscription as B 116. Chengsung 6: 21, drawings (there were four in the series) T'ao 2: 7, Shan 8: 99 (lid).

B 118. Hu. Same inscription as B 116. Chengsung 7: 34, photo (there were two Hu) Wuying 87, our Pl. XLVI.

B 119. Fu. »史 頌 The scribe Sung has made...». Kün 1/3: 62, ill. Chengts'iu 21, our Pl. L.

B 120. Ih. »The scribe Sung has made...». K'ia 16: 25, photo Shuangkien 21, our Pl. XLV. Also ill. Chengts'iu 53.

B 121.* P'an. »The scribe Sung has made...». K'ia 16: 12.

The name *shï* Sung connects B 114, 115, 119, 120, 121. That the Sung of B 116, 117, 118 was the same person as *shï* Sung is not *eo ipso* certain, since there is not the same title. But the script is absolutely identical and is probably from the same hand; moreover the date: »3rd year, 5th month» in both series is striking. They must belong together. The reasons given by Kuo Mo-jo for attributing this group to Kung wang's reign are very inadequate. We can only know from the script that it belongs to the second half of Western Chou.

B 122—B 138 have many connecting points in common as regards personal names, and since they all have the late script type (i. e. in the cases where this is ascertainable thanks to rubbings), they may be from approximately the same time.

B 122—B 128 form a group:

B 122. Ting. »In the 3rd month, 1st quarter, on the day kia-sü, the King was in K'ang wang's temple; 榮 伯 Jung po entered and assisted 康 K'ang: I, K'ang, ... presume to signal the great illustrious grace of the Son of Heaven, and therefore have made my fine father 釐 伯 Li po's precious vessel; ....; 鄭 井 Cheng Tsing.» Chengsung, Pu shang 14, Tahi 91, drawing Ningshou 1: 17, photo in set of picture postcards of the Peking Palace Museum.

B 123. Chung. 鄭 井 叔 Tsing shu from Cheng has made...». K'ia 1: 17, photo Shuangyü 2.

B 124. Chung. ».... may 虘 Ts'o and 蔡 姬 Lady Ki of Ts'ai for ever treasure it; ... therefore make my fine father Li po's (as in 122)...». K'ia 2: 11; photo Senoku Betsu 10.

B 125. Chung. In the 1st month, 1st quarter, on the day ting-hai, Ts'o (as in 124) made the precious bell in order to show his piety to the deceased 己 伯 Ki po; ... may Ts'o and the Lady Ki of Ts'ai (as in 124) for ever...». K'i 9: 11, photo Senoku Betsu 2.

B 126. Kuei (lid). »X has made Li po's (as in 122) precious vessel.» Photo Shuangkien 13.

B 127.* Sü. 鄭 井 叔 康 Tsing shu K'ang of Cheng has made it.» Kün 2/2: 20.

B 128.* Li. 鄭 井 叔 蒦 父 Tsing shu Huo-fu of Cheng has made...». Chengsung, Pu shang 16.

B 122, 123, 127, 128 are connected by the name Cheng Tsing shu; his personal name was K'ang, (122, 127) his *tsï*, honorary name, was Huo-fu (128); in 122 Cheng Tsing is placed in a very curious and unusual way as a signature after the inscription. His deceased father Li po (122) recurs in 124 and 126;

125 is connected with 124 through »Ts'o and the Lady Ki of Ts'ai». We have already earlier had a Tsing shu (B 40), but in a group with clearly early writing. Here we have a Tsing shu with just as clearly late script. They are obviously not the same person: »Third brother from Tsing» is a name which might well be repeated, just as 虢 仲 Kuo chung »Second brother from Kuo» (cf. p. 51) and such-like. A Tsing shu, possibly a third personage, crops up in the group B 154—159 below.

B 129. Kuei. »In the 12th month, 1st quarter, on the day ting-ch'ou, the King was in Tsung Chou, and went to the Great temple; 榮 伯 Jung po assisted 同 T'ung...; the King ordered T'ung to attend 吳 大 夫 Wu *ta-fu*...;...the Son of Heaven...;...my fine father 惠 仲 Huei chung.» Chengsung 6: 7, Tahi 92; drawing Sükia 6: 29.

B 130. Kuei. »In the King's 11th month, 2nd quarter, on the day ting-hai, 榮 季 Jung ki entered and assisted 卯 Mao...; 榮 伯 Jung po called and ordered Mao and said...;...to govern the temples of 莽 P'ang and the people of P'ang...». K'i 4: 19, Tahi 91, drawing Huaimi, Hia 26.

We have placed this here with 129 because of the name Jung po, but with hesitation. It is not written by the same hand, and the script is neither early nor late, in fact very indifferent.

B 131—137 form a group:

B 131. Ting. »Ch'eng said: ... my father 幽 大 叔 Yu T'ai-shu...; 噩 侯 馭 方 O-hou (the prince of O) Yü-fang led the Southern I Barbarians and the Eastern I Barbarians and grandly attacked the Southern countries and the Eastern countries... 武 公 Wu kung has then (ordered) us...». Tahi 105, drawing Po 2: 21.

B 132. Kuei. »O hou (the prince of O) made a bridal-gift vessel for Lady 姬 Ki, consort of the King...». K'i 16: 24, Tahi 104; photo Wuying 75, our Pl. XL. That this O hou was the same as the preceding is of course very uncertain, and the vessel is placed here because of its late script type.

B 133. Kuei (lid). »In the 9th month, 1st quarter, on the day mou-shen, the prince said: 不 嬰 馭 方 Pu-k'i and Yü-fang (or: Pu-k'i Yü-fang), the Hien yün grandly attack 俞 Yü in the West; the King has ordered us...; our august grandfather 公 伯 Kung po and 孟 姬 the Lady Eldest sister Ki...». K'i 4: 30, Tahi 102, photo Mengwei, Shang 34, our Pl. XLI.

Kuo takes Pu-k'i to be the *tsï* honorary name and Yü-fang the ordinary personal name of one and the same person. Liu Sin-yüan, better, takes them to be two persons, Pu-k'i and Yü-fang (= O hou Yü-fang of B 131); that Yü-fang is the same person in both B 131 and 133 is very plausible: it is evidently a question of a prominent general. Kuo combines our inscr. 133 here with an entry in the Chu shu ki nien (*ap.* Hou Han shu, Si K'iang chuan) that Ih wang ordered the prince of Kuo to make an expedition to 俞 泉 Yü-ts'üan, and dates the inscription accordingly, in identifying this Yü-ts'üan with the Yü of our inscription. But this is much too risky. Wu K'i-ch'ang, without sufficient reasons, dates it in Süan wang's time.

B 134. Kuei. »In the King's 10th month, the King was in Ch'eng Chou; the Huai I Barbarians of the South...entered and attacked...; the King ordered 𢦏 Yü to

pursue them . . . ; . . . in the place of 榮伯 Jung po; 武公 Wu kung entered and assisted Yü . . . ; . . . the Son of Heaven . . .». Tahi 107, drawing Po 16: 36.

B 135.* Ting. The King made a war expedition to the South; . . . O hou Yü-fang (as in 131) presented . . . to the King. . .». K'i 2: 7, Tahi 103.

B 136. Kuei. »叔向父禹 Shu Hiang-fu Yü said . . . : my august grandfather 幽大叔 Yu T'ai-shu. . .». K'ia 11: 9, Tahi 144.

In this group, B 131 (possibly with 132), 133 and 135 are connected by the name Yü-fang, prince of O. 134 is connected with 131 by the person Wu kung, all the more certain since in both it is a question of an expedition against the South. 136 is a generation later than 131: Yu T'ai-shu is called father in the former and grandfather in the latter.

B 137. Kuei. »In the 12th year, 3rd month, 2nd quarter, on the day ting-hai, the King was in the [illegible]侲宮 X X temple; the King called 吳師 Wu shï to summon 大 Ta . . . ; . . . the Son of Heaven. . .». Chengsung 6: 10, Tahi 93, drawing Sükia 12: 46, lid in Shan 8: 97.

B 138. Ting. »In the 15th year, 3rd month . . . on the day ting-hai, the King was in the X X temple (as in 137); 大 Ta with his friends kept guard; . . . the Son of Heaven . . . ; my illustrious father 己伯 Ki po. . .». Chengsung 3: 35, Tahi 95, drawing Huai, Hia 9, also Kukien 2: 17, 19. The peculiar temple name concomitant with the personal name Ta connects 137 and 138.

As stated above, there are certain points which seem to connect the group B 122—128, the inscr. 129 and 130, the group 131—137 and the inscr. 138, 139 into one larger group of approximately the same period.

There is first the name Jung po, which occurs in B 122, 129, 130 and 134. This does not mean 'prince of Jung' but 'Eldest brother from Jung', since there is a Jung ki 'Youngest brother from Jung' in 130. There might, of course, be several Jung po (just like Kuo chung etc., see p. 51), but the late script type narrows the range and makes it more probable that it is one and the same person. There is further the Wu *ta-fu* of 129 and Wu Shï of 137. They are not necessarily the same person, but for the same reason it is quite likely that they are. And then, finally, there is the father Ki po both in 125 and 138. The coincidences are too many to be fortuitous. We thus obtain a comprehensive group B 122—138.

A reliable dating of this big group is hard to achieve, beyond the fact that it belongs to the second half of Western Chou. Yet there are certain indications which make it at least probable that it should be combined with the group B 78—86 above, of Kung wang's time.

In that group we have a prominent person, the *sï-ma* Tsing po 'Eldest brother from Tsing'; here we have Cheng Tsing shu 'Third brother from Tsing of Cheng' as an important personage. There we had a *nei-shï* Wu (吳), here we have a Wu ta-fu, a Wu Shï: it is quite possible that they are one and the same person. In B 88, in the reigns immediately after Kung wang, mention is made of a grandfather Li ki 'Youngest brother Li'; here we have a father Li po 'Eldest

brother Li'. In B 93, in the reigns immediately after Kung wang, there is a father Huei shu 'Third brother Huei'; here we have a father Huei chung 'Second brother Huei'. These indications are not conclusive, and therefore we have not dared to place our group here B 122—138 along with B 78—86, but they are highly suggestive, and the later part of the 10th century is at least very probable.

B 139. Kuei. »In the King's 1st year, 1st month, the King was in 吳 Wu (Yü?), and went to the Great temple of Wu (Yü?); . . . the King called the scribe X to give a brevet to 師酉 Shï Yu; . . . the Son of Heaven. . .». K'i 4: 22, Tahi 95, drawing Lianglei 6: 10, also T'ao 2: 14.

Both Kuo and Wu take Wu to be the same as the person Wu in the preceding group, but that is very unlikely. It is here a place name. The script is of the late type.

B 140. Li. »杜伯 Tu po made the fine vessel of the Lady 叔嫞 Third sister Yung.» Chengsung 4: 13, Tahi 173, drawing Shan 3: 25.

B 141.* Sü. »Tu po has made. . .». Chengsung 6: 43, Tahi 172.

As pointed out by Kuo, Mo-tsï (Ming kuei p'ien) says: »Süan wang killed his minister Tu po.» If Tu po means 'the prince of Tu', then of course this cannot aid in dating inscr. 140, 141. If it means 'Eldest brother from Tu' and thus is more of a personal name, we can more easily accept Kuo's dating, which in any case is not conclusive. The script is late and would suit Süan wang's time quite well.

B 142. Ting. »In the 9th month, 3rd quarter, on the day kia-sü, the King went to the temple of Chou . . . ; 司徒南仲 the *sï-t'u* Nan chung assisted 無惠 Wu-huei . ; the King called the scribe 㫚 Yu to give a brevet to Wu-huei . . . ; . . . the Son of Heaven. . .». K'i 2: 10, Tahi 168, drawing Tahi t'ulu 24, photo Burlington Art Magazine Sept. 1923, our Pl. XXXIV.

This is the famous tripod of the Silver Island. Chinese scholars have identified this Nan chung with the Nan chung of the ode Ch'ang wu in the Shï king (he was a minister of Süan wang's; Legge's translation and note are wrong), and dated it in Süan wang's time. This is too uncertain; yet the script is of the late type. Some authors think that 無 is a short-form for 鄦 Hü (= 許), others again read 專 Chuan instead of 惠 Huei. The question remains open.

B 143. Ting. »The King said: Father Yin, the great illustrious Wen wang and Wu wang . . . ; . . . the four regions (the whole country) are greatly ungoverned and turbulent; . . . 毛公厝 Yin, prince of Mao, has signalled the august grace of the Son of Heaven and made . . .». K'i 2: 41, Tahi 148, our Pl. XXXIII. The vessel was found in Shensi.

This famous inscription of 497 characters unfortunately contains nothing which could give a really solid *point d'appui* for the dating. A long series of prominent scholars — a. o. Sü Tung-po, Wu Ta-ch'eng, Sun I-jang, Wang Kuo-wei, Wu K'i-ch'ang — have dated it in Ch'eng wang's time, but we are afraid that

this is principally because of a general feeling that such a magnificent, long inscription ought to be from the greatest days of the dynasty. Kuo Mo-jo on the contrary dates it late, in Süan wang's time, and his reasons seem to us to be quite convincing: the great days of the founders and their coadjutors are spoken of as relatively distant; there are various phrases referring to great disorder and disorganisation. To us it is obvious, from the script type, that the early part of the dynasty is excluded. The lines are very regular, the characters of equal size, well-balanced and neatly drawn, with gracefully curved lines — a typically advanced script; a comparison with the long inscriptions of the Nie Ling vessels (B 22—25 above) of Chao wang's time will at once convince us of a considerable difference of age. We have no hesitation in placing the vessel in the second half of Western Chou.

B 144. P'an. »In the 28th year, 5th month, 3rd quarter, on the day keng-yin, the King was in Chou, in K'ang wang's and Mu wang's temple; . . . the steward [illegible] Kün assisted 寰 Huan . . . ; I, Huan, presume to signal the great illustrious grace of the Son of Heaven and have made the precious vessel of my august father 鄭伯 the prince of Cheng and the Lady 姬 Ki of Cheng.» K'i 18: 25, Tahi 170; drawing Tahi t'ulu 158.

B 145. Kuei. »The King said thus: 師寰 Shï Huan . . . I order you to . . . make an expedition against the Huai I Barbarians. . .». K'i 4: 25, Tahi 170, drawing T'ao 2: 12.

The script type in both these inscriptions is late. There is a vessel in Tch'ou VIII, IX with a similar inscription as B 144. The late script type does not at all tally with the early (Yin) type of the vessel, and it is obviously made in imitation of B 144. Kuo Mo-jo seems to be of the same opinion, for though he has made use of Tch'ou's work, he does not record this inscription.

B 146. Kuei. »大師小子望 The *t'ai-shï*, the little-one Shï Wang. . .». K'ao 3: 38, drawing *ibid.*

B 147.* Ting. »The *t'ai-shï*, the little-one Shï Wang said: My great illustrious father. . ; . . . the Son of Heaven . . .». K'ia 5: 7, Tahi 74.

B 148.* Hu. »The *t'ai-shï*, the little one Shï Wang has made . . .». K'ia 14: 17.

The Chinese scholars generally take *siao tsï* to be an official's title. There is such an office mentioned in the Chou li; but since this office never occurs in other texts, and *siao tsï* is common in the inscriptions, we take it to be an ordinary expression of modesty. The script type in these inscriptions is late.

B 149. Kuei. »In the King's 1st month, on the day kia-wu, the King said: X, I order you to govern the people of Ch'eng Chou. . .». Chengsung, Pu shang 27, Huei k'ao 16, drawing Shan 8: 88. Script of the late type.

B 150—152 form a group:

B 150. Kuei. »In the 11th month, 2nd quarter, on the day keng-sü, 鄭虢仲 Kuo chung from Cheng made. . .». Chengsung 5: 32, Tahi 214, drawing Kukien 27: 28.

B 151. Kuei. »In the 3rd month, 1st quarter, on the day keng-wu, the King was in the 華 Hua temple; the King called Kuo chung to enter and assist 何 Ho . . . ; . . . the Son of Heaven. . .». Tahi 119; drawing Sü K'ao ku t'u 3: 25.

B 152. Sü. »Kuo chung with the King went on a war expedition to the South, and attacked the Huai I Barbarians of the South; when he was in Ch'eng Chou. . .». Chengsung 6: 41, Tahi 118, photo Shïerkia 6: 11.

Kuo Mo-jo places B 152 among the Royal Chou vessels and B 150 among the vessels of the court of Cheng. Yet the hand is absolutely identical in both, and it must be the same Kuo chung.

Kuo dates B 152 in the reign of Li wang, because the Hou Han shu (Tung I chuan) has an entry that Li wang ordered Kuo chung to attack the Huai I Barbarians. It is true that, as pointed out by Wang Kuo-wei (Ku pen Chu shu ki nien tsi kiao) the Hou Han shu, in treating of the Barbarians of Chou time, builds entirely on Shï ki and Chu shu ki nien; and since this entry is not in the Shï ki, it very likely emanates from the Chu shu ki nien, a Chou time work. Yet the evidence is frail in the extreme. The name Kuo chung says nothing; there were many Kuo chung. One was a younger brother of Wu wang at the very beginning of the dynasty. One is mentioned in the Tso chuan in 704 B. C. How many Kuo chung 'Second brother from Kuo' there were in between we cannot know. We can date B 152, and with it B 150, in Western Chou time, since the kings of Eastern Chou never had the power of making any war expeditions against the South. And from the script type we can easily attribute them to the second half of the period. The Cheng in B 150, which has caused Kuo Mo-jo to place this inscription under the feudal Cheng, is easily explainable. There were several states Kuo, and one of them, Tung Kuo, was extinguished and incorporated by Cheng before the Ch'un ts'iu period. B 151 is added here tentatively. Even through the drawn reproduction of the inscription we can still discern that it is of the later script type, though not by the same hand as 150 and 152. The formula is such as is typical of Western Chou.

III. *Inscriptions from Western Chou generally (1122—771).*

In the preceding categories (I and II) we have registered such vessels as either from their content or their script type could be dated in the first or the second half of Western Chou. There remains a number of inscriptions which are clearly of Western Chou time but which cannot be attributed with any certainly to either of those categories: there are no safe historical *points d'appui*, and their script is too indifferent and neutral to allow of a decision.

B 153. P'an. »In the King's 11th month, 2nd quarter, on the day yi-wei, the King was in Chou. . .». Belonging to Mrs. Sedgwick, our Pl. XXV.

B 154—B 159 form a group:

B 154. Tsun. »In the 6th month, 1st quarter, the King was in Cheng; on the day ting-hai, the King went to the Great Room; 井叔 Tsing shu assisted 宂 Jung; . . . the King . . . ordered 史懋 the scribe Mou to give to Jung. . .». K'i 17: 15, Tahi 100, drawing Ningshou 3: 16.

B 155. P'an. In the 5th month, 1st quarter, the King was in Chou; he ordered to

make a brevet, and the *nei-shï* gave Jung...». Kün 2/3: 74, Tahi 99. This P'an (also called Ho) has belonged to Yüan Yüan, the famous author of the Tsi ku chai chung ting i k'i k'uan chï, and now belongs to the Museum für Völkerkunde, Berlin. Our Pl. XXV.

B 156. Tsun. »In the 3rd month, 1st quarter, on the day yi-mao, the King was in Chou, and went to the Great Room; 咸 when all was ready, Tsing shu assisted X...». K'i 5: 14, Tahi 89, drawing Heng 50.

B 157.*. Kuei. »In the 12th month, 1st quarter, the King was in Chou; ... Tsing shu assisted Jung...». K'i 16: 32, Tahi 97.

B 158.* Hu. »In the 8th month, 4th quarter, on the day mou-yin, the King was in P'ang king ...; himself he ordered the scribe Mou (as in 154)...». K'ia 14: 13, Tahi 100.

B 159.* Fu. »In the 3rd month, 2nd quarter, on the day yi-mao, the King was in Chou; he ordered Jung to be *sï-t'u* and to govern Cheng.» K'i 17: 23, Tahi 97; K'i 4: 3 mentions a Kuei with the same inscription.

In B 156 some authors, a. o. Kuo and Wu, take 咸 to be an abbreviation for 咸 林 Hien lin, original name of a place in Cheng (Cheng Hüan, Shï pu, see Shï san king chu su, Shï king, introd.); yet on the one hand, it is doubtful whether 咸 should not be 棫 (cf. Chavannes Mém. Hist. IV: 449), on the other hand, such an abbreviation is very unlikely.

B 154 and 157 have both Tsing shu and Jung and must belong together; with those 158 is connected by Shï Mou. Tsing shu reverts in 156, Jung in 155 and 159. If we combine the latter vessels with the former, it is because of the script hand, which is very similar in them all. There was a *shï* Jung 'scribe Jung' in B 108 above, who was evidently another person (the script there being of a later type). And there are also various Tsing shu 'Third brother from Tsing' just as there are various Kuo chung 'Second brother from Kuo' (cf. p. 51 above). One Tsing shu occurs in B 40, in a group of clearly early vessels (Mu wang's time). Another Tsing shu from Cheng occurs in B 122 ff. in a series of equally clearly late vessels; his full name was Tsing shu K'ang (*tsï* Huo-fu). Mu t'ien tsï chuan tells us of yet another: Cheng Tsing shu 利 Li. In the present group we have a Tsing shu again, and if it is not simply a third person of the same name, it is difficult to tell with which of them this series should be connected. That we have here some references to Cheng (154, 159) tells us nothing, for Tsing was situated in Cheng (Cheng was a district in Shensi in existence long before it was given in fief to a son of Li wang). The script is very indifferent, but its stiff form speaks rather of an earlier date than that of Tsing shu K'ang (B 122 ff).

H. Maspero (J. As. 1927 p. 132) considers B 154 and B 155 to be spurious; his reasons are ingenious but not valid. In the first place he has built his whole argumentation on a date *ting-mao* in B 154, but this is erroneous: the inscription has *ting-hai*. In the second place it is easily seen that a forger, who had made B 155 after the pattern of 159 (which Maspero means), would not have omitted the cyclical characters of the day, 159 having such characters.

B 160. Kuei. »In the 6th month, 1st quarter, the King was in P'ang king; on the day ting-mao the King ordered 靜 Tsing ...; I, Tsing, presume to salute and bow down the head and to signal the great illustrious grace of the Son of Heaven...». K'ia 11: 5, Tahi 146, drawing Kukien 27: 14.

B 161. Yu. »In the 4th month, 1st quarter, on the day ping-yin, the King was in P'ang king; the King gave Tsing a bow...». Chengsung 8: 30, Tahi 147, drawing Kukien 15: 20.

These two inscriptions both have P'ang king and Tsing, and belong together. The Yu 161 agrees in type and decoration so exactly with the Kuei 160 that they must be from the same artisan. Shan 4: 35 has a Yu with the same inscription as 161, but of a quite different type; is it a forgery?

Because the Shï ki (Chou pen ki) says that Süan wang's personal name was 靜 Tsing, Kuo Mo-jo thinks that these vessels were made when he was crown-prince! This cannot be taken seriously.

B 162. Hien. »井 伯 Tsing po made...». Chengsung, Pu shang 17, photo Senoku I: 14.

We had a *sï-ma* Tsing po 'Eldest brother from Tsing' in group B 78—86 above. Here is another person: the script is here more stiff and primitive and certainly considerably earlier.

B 163. Yu. »井 季 𡚬 Tsing ki Shï has made...». K'i 6: 8, photo Senoku II: 67, our Pl. XXIV, also drawing Kukien 16: 8.

B 164. Tsun. Same inscription as B 163. Chengsung 9: 28, drawing Ningshou 3: 23.

B 165.* Ting. Same inscription as B 163. Chengsung 2: 32.

B 166. Kuei.» 季 𡚬 Ki Shï (?) made his fine father 井 叔 Tsing shu's vessel...». Chengsung 4: 47; drawing Kukien 13: 29.

Earlier we have had several Tsing po 'Eldest brother from Tsing' and Tsing shu 'Third brother from Tsing'. Here in B 163—165 we have Tsing ki 'Youngest brother from Tsing'. It is possible that the name of B 166 is but a variant of that of 163; in any case it belongs to the Tsing series, since the father was a Tsing shu.

We have placed all these vessels (162—166) here among the Royal Chou vessels, for we have seen earlier that the family from Tsing played such an important part in the Royal court.

B 167. Kuei. »In the King's 3rd month, 1st quarter, on the day sin-mao, 憲 叔 Hien shu attended at the sacrifice in the Great temple ...; he signalled the grace of the Son of Heaven...». Tch'ou XII, photo *ibid.*, our Pl. XV.

B 168. Ting. »In the 10th month there was an envoy in 鄫 Tseng; ... in Ch'eng Chou...». Kün 2/3: 36, drawing Shan 2: 73.

B 169. Sü. »... X saluted and bowed down the head and signalled the great illustrious fine grace of the Son of Heaven ...; may 叔 邦 父 Shu Pang-fu and 叔 姞 the Lady Third sister Ki[2] have ten thousand years...». Tahi 157, drawing K'ao 3: 34.

B 170. Fu. »Shu Pang-fu has made...». Po 18: 7, drawing *ibid.*

B 171. Kuei. »In the 6th month, 2nd quarter, 穆 穆 王 the very august King was in P'ang king.... 遹 Yü saluted and bowed down the head...». Chengsung 6: 3, drawing Shan 8: 86.

Kuo Mo-jo thinks that this is a dated vessel: there is Mu wang! He has, however, not observed the reduplication mark: the inscription runs, not »Mu wang tsai P'ang king» but »Mu mu wang tsai P'ang king» — which makes all the difference in the world. We know of a Mu wang, but of no Mu-mu wang. Mu-mu is a common honorific. On the Shï Wang ting (B 147) it is said of the father of Wang: *Mu mu k'o ming küe sin* »Very august he could make his mind illuminated». And the Ta K'o ting (B 87 above) begins: »K'o said: *mu mu chen huang tsu Shï Hua-fu* very august was my grandfather Shï Hua-fu». So our vessel here has nothing whatever to do with Mu wang.

B 172—174 form a group:

B 172. Kuei. »In the 4th month, 1st quarter, on the day ting-mao, the King reviewed the merits of 晉 Yu, and gave three oxen; ... Yu signals the grace of the King...». K'i; 4: 4, drawing Kukien 27: 1.

B 173. Kuei. »In the King's 3rd year, 4th month, 2nd quarter, on the day sin-yu, the King was in Chou, and sojourned in the *Sin kung* New temple; the King called Shï Chen to give 師 遽 Shï Kü cowries ...; ... the Son of Heaven ...». K'i 4: 7, Tahi 78; drawing Heng 39, also P'anku, Hia 33.

B 174.* Yi. »In the 1st month, 2nd quarter, on the day ting-yu, the King was in Chou, in the Inner chamber of K'ang wang's temple; Shï Kü reviewed the merits of 晉 Yu; the steward 利 Li gave Shï Kü ...; ... the Son of Heaven ...». K'ia 13: 9, Tahi 79.

B 173 and 174 are connected by the person Shï Kü; Yu must be the same in 172 and 174, since their script is of the same hand. There is a »scribe Yu (same character as 172, 174) in the Wu-huei Ting (B 142), but we cannot know whether it is the same person, for the script is not similar. For the same reason we dare not identify the Li of 174 with the Li of B 85 above.

B 175. Tsun (Hu). »In the 16th year, 7th month, 2nd quarter, on the day yi-wei, 伯 大 師 Po T'ai-shï gave 伯 克 Po K'o 30 servants; Po K'o presumes to signal the grace of 天 君 王 伯 the Heavenly chief, the Royal Po (Eldest brother) ...». Tahi 108, drawing Po 6: 33.

The T'ai-shï Po was, it seems, a Royal prince. Kuo identifies Po K'o with the K'o of the K'o chung (B 96), but there is really no support for this.

B 176. Ting. »In the King's 23rd year, 9th month, the King was in Tsung Chou; the King ordered Wei Lüan...». Tahi 129, drawing Sü K'ao ku t'u 4: 19.

B 177. Kuei. »My great illustrious august grandfather ...; ... 番 生 Fan-sheng presumes to respond to the grace of the Son of Heaven...». Tahi 142, drawing T'ao 2: 16.

Kuo easily identifies this Fan-sheng with the Fan of the ode Shï yüe chï kiao: Fan wei sï-t'u »Fan was sï-t'u»!

B 178. Kuei. »In the 6th month, 2nd quarter, on the day sin-sï, the King ordered 𤔲 Man and ...; ... 吳 姬 the Lady Ki of Wu (Yü) ...; Man signals the grace of the Son of Heaven...». Chengsung 6: 2, Shan 8: 84.

Wu K'i-ch'ang places this vessel in the 43rd year of Chao wang: Mu wang

had the personal name 滿 Man, and the Man of our vessel was Mu wang when crown prince!

B 179. Kuei. »In the 6th year, 1st quarter, on the day ting-sï, the King was in Cheng; he reviewed the merits of 𠬪 Nie...». Sükia 12: 40, drawing *ibid.* The formula is typical of Western Chou.

B 180. Ting. »In the 5th month, 3rd quarter, the King was in 師 秦 宮 the ancestral temple of Shï Ts'in ...: the Son of Heaven...». Po 3: 31, drawing *ibid.*

B 181. Ting. »In the 14th month, 4th quarter, the King was in 下 ○ Hia-x 雝 公 the prince of Yung...». Po 2: 29, drawing *ibid.* The same K'ao 1: 9. Hia-x has probably to be filled out into 下 都 Hia-tu, one of the Honan residences.

B 182. Kuei lid. »追 Chuei reverently morning and evening ...; the Son of Heaven has largely bestowed grace on Chuei...». K'i 16: 33, drawing Huaimi, Hia 25. Kukien 27: 18 gives a Kuei and Sükia 5: 15 gives a Hu with the same inscription. These are in all probability spurious, as shown by the style of the vessels (the Hu in Huai style, the Kuei a *mixtum compositum*).

IV. *Not illustrated inscriptions from Western Chou.*

We add here some more inscriptions which belong to the Western Chou period; since we have no access to illustrations of the vessels, they are of less importance to the present study, and we record them still more briefly than those given above.

B 183. Kuei. »... deceased father Wen wang...». K'i 4: 11, Tahi 1 (spurious?).

B 184. Chï. »... vanquished 商 Shang, ... Chou kung...». Cheng 9: 29, Tahi 3 (spurious?).

B 185. Kuei. »... Wen and Wu...». K'ia 11: 23, Tahi 42.

B 186. Kuei. »... Tsung Chou...». Chengsung, Pu shang 26.

B 187. Ting. »... K'ang wang's temple...». K'i 16: 14, Tahi 25.

B 188. Kuei. »... Tsung Chou...». Kün 2/3: 10.

B 189. Ting. »... 11th month, 1st quarter, on the day ting-hai ... Tsung Chou...». Kün 3/2: 49.

B 190. Ting. »... P'ang king...». Chengsung 3: 16.

B 191. Chung. »... the King ... Chou...». Kün 3/1: 30.

B 192. Yi. »... followed the King ... attack 楚 荊 Ch'u King». T'u shu kuan kuan k'an, 6: 5, p. 40.

B 193. Kuei. »In the 1st month, 1st quarter, on the day yi-hai ... K'ang wang's temple...». K'i 4: 1, Tahi 49.

B 194. Ting. »In the 5th month, 4th quarter, on the day jen-sü ... the King ... in the Great Room...». Chengsung 3: 27, Tahi 49.

B 195. Ting. »... sacrificed to 卲 王 Chao wang...». K'ia 4: 21, Tahi 50.

B 196. Kuei. »... Chao wang's...». K'ia 9: 3.

B 197. Yu. »In the 4th month, 1st quarter, on the day kia-wu, 懿 Yi wang was...». Kün 3/1: 32, Tahi 77.

B 198. P'an. »In the 20th year, 1st month, 3rd quarter, on the day kia-sü ... in Chou, in K'ang wang's temple...». Chengsung 10: 30, Tahi 169.

B 199. Yi. »In the 1st quarter, on the day ting-hai, the King was in Chou, in *Ch'eng ta shï* the Great Room of Ch'eng wang's temple... 吳 Wu entered...». K'i 5: 19, Tahi 62. Nothing says that this Wu is the same as in B 82 or in B 129.

B 200. Kuei. »In the 1st year, 3rd quarter, on the day ting-hai, the King went to the temple . . . the steward 㝬 Hu . . . . the lady Kiang . . . Son of Heaven. . .». Sie Shang-kung 14: 9, Tahi 86. Nothing says that this Hu was the same as in B 40, in B 96 or in B 103.
B 201. Kuei. »In the 5th month, 4th quarter, on the day sin-wei, the King sent . . . envoy to the I Barbarians, . . . Son of Heaven. . .». K'i 4: 2.
B 202. Kuei. »In the 13th year, 6th month, 1st quarter, on the day mou-sü, ... Chou . . . K'ang wang's temple, . . . 望 Wang. . .». Kün 3/1: 83, Tahi 73. Nothing says that this Wang was the same as in B 146.
B 203. Ting. ». . . P'ang king. . .». Chengsung 3: 23.
B 204. Kuei. »The great illustrious Wen and Wu . . . grace of the Son of Heaven. . .». Sie Shang-kung 14: 14, Tahi 155.
B 205. P'an. In the 5th year, 3rd month, 4th quarter, on the day keng-yin, ... King . . . attacked the Hien-yün . . . Ch'eng Chou . . . Southern I Barbarians. . .». K'i 8: 19, Tahi 160.
B 206. Kuei. »In the 5th month, 3rd quarter . . . Ch'eng Chou. . .». K'i 16: 31.
B 207. Yi. »In the 10th month, 1st quarter, on the day sin-sï . . . P'ang king. . .». K'i 5: 17.
B 208. Ting. ». . . Tsung Chou. . .». K'ia 5: 10, Tahi 147.
B 209. Yi. ». . . P'ang king . . . 静 Tsing . . . Son of Heaven. . .». K'i 17: 17, Tahi 147. Nothing says that this Tsing was the same as in B 160.
B 210. Ting. »In the 3rd year, 4th month, on the day keng-wu, the King was in 豐 Feng. . .». Siao-t'ang 2: 98.

C. BRONZES OF THE FEUDAL COURTS.

I. *Illustrated bronzes.*

Here are recorded the inscriptions which are accessible in catalogues giving illustrations also of the vessels. A few inscriptions without such illustrations (then marked by an asterisk) are added, when they bear upon the same persons or events as the illustrated ones.

Ch'en 陳 (敶).

This state, situated in Ch'en-chou-fu, East Central Honan, was extinguished by Ch'u in 478 B. C., so C 1, 2, 3, 5 must be anterior to that date.

C 1. Fu. »In the 1st month, 1st quarter, on the day ting-hai, the prince of Ch'en made for 孟姜 the Lady Eldest sister Kiang. . .». K'ia 15: 5, Tahi 219; photo Mengwei, Sü 15, our Pl. XLII, also drawing Kukien 29: 5.
C 2. Fu. »In the 1st month, 1st quarter, on the day ting-hai, the prince of Ch'en made for 王仲嬀 the consort of the King, the Lady Second sister Kuei^{1}. . .». Chengsung, Sü chung 1, drawing Shan 9: 8, 9: 9 (two vessels).
C 3. Kuei. »The prince of Ch'en made for the Lady 嘉姬 Kia Ki^{1}. . .». K'ia 9: 6, drawing Sükia 6: 24.
C 4. Ting. »Sheng-X of Ch'en made. . .». Chengsung 2: 46, photo Wuying 26, our Pl. XXXVI.

C 5. Ih. »伯元 Po-Yüan, son of the prince of Ch'en, made for Lady Eldest sister Kuei^{1}. . .». Chengsung 10: 39, Tahi 218, drawing Kukien 30: 5, our Pl. LVI. Kuo identifies Po Yüan with the prince 完 Wan, son of Li kung (706—700); this is a mere guess.

Cheng 鄭 (奠).

This state, situated in Sin-Cheng-hien of Cheng-chou, Central Honan, was extinguished by Han^{2} in 375 B. C., so C 6 and 6 a must be anterior to that date.

C 6. Fu. »The *t'ai-sï-kung* 召叔山父 Shao shu Shan fu of the prince of Cheng made. . .». Chengsung 6: 34, Tahi 215; drawing Ningshou 11: 24.
C 6 a. Li. »The prince of Cheng, son of X-tsï, made. . .». Photo Shïerkia 12: 8.
C 7. Kuei. »In the 10th month, 1st quarter, on the day ting-mao, the King ordered 仲子紳 Chung-tsï Shen of Cheng to attack. . .». Shan 8: 78, drawing *ibid.*
C 8. Li. »羊伯 Yang po of Cheng made for 季姜 the Lady Youngest sister Kiang.». Kün 2/1: 74; photo Mengwei, Shang 16, our Pl. XXXVII.
C 9. Kuei. »義伯 I po of Cheng made. . .». Photo Wuying 81.
C 10. Ih. »I po of Cheng (as C 9) made for the Lady Youngest sister Kiang (as C 8). . .». Chengsung 10: 33, drawing Kukien 32: 4.
C 11. Sü. »義羊父 I Yang-fu of Cheng made. . .». K'i 17: 31, photo Mengwei, Shang 17.
C 12. Kuei. »饔原父 Yung Yüan-fu of Cheng made. . .». Chengsung 4: 44, drawing Shan 8: 42.
C 13.* Ting. »Yung Yüan-fu of Cheng. . .». K'ia 5: 20.
C 14. Hien. »伯高父 Po Kao-fu of the house of Cheng made. . .». K'ia 17: 4; drawing Shan 3: 37, our Pl. XLIX.
C 15. Li. »In the 5th month, 1st quarter, on the day ting-yu, 師○父 Shï X-fu of Cheng made. . .». Sükia 14: 3, drawing *ibid.*
C 16. Hu. »楙叔賓父 Mou shu Pin-fu of Cheng made. . .». K'ia 14: 4, Tahi 216; drawing Heng 55, also P'anku, Hia 21.
C 17. Ting. »伯𩰫父 Po Tao-fu of Cheng made. . .». Shan 2: 69, drawing *ibid.*

Ch'ï 屖, 遟, 遲.

That Ch'ï (we read it so because of the third script variant) was a feudal state follows from C 18, 19 and C 210 below, which show marriage alliances with other feudal courts. Its situation cannot be determined.

C 18. Ting. I, 伯頵父 Po Kün-fu, have made for my august father the prince of Ch'ï and 吳姬 the Lady Ki^{1} of Wu (Yü). . .». Kün 2/3: 20; drawing Huaimi, Hia 6, also Lianglei 3: 7.
C 19. Kuei. »I, Po Kün-fu, have made for my august father 遟伯 the prince of Ch'ï and the Lady Ki^{1} of Wu (Yü). . .». Sükia 12: 49, drawing *ibid.*

Chou 周.

We place here vessels bearing the names of persons from Chou — they may equally well be of Eastern Chou as of Western Chou time, and therefore cannot be placed in cat. B above.

C 20. Yu. »In the 9th month, 2nd quarter, on the day yi-hai, X of Chou cast. . .». Ningshou 7: 4; drawing *ibid.*
C 21. P'an. »棘生 Ki sheng of Chou made for 䢵 the Lady Yün. . .». Chengsung 10: 28, photo Paoyün 79, also drawing Süyi 15: 7.

C 22.* Kuei. Same inscription as C 21. K'i 3: 15.
C 23. Hu. »䰧 Cha of Chou made. . .». K'i 6: 30; drawing Kukien 19: 11, Sükia 5: 22; the lid is now in the National Museum of Stockholm.

Chu^{1} 邾 (鼄).

There were two states Chu^{1}: Chu^{1} and Siao Chu^{1} (Little Chu); one was in Tsou-hien, one in T'eng-hien, both of Yen-chou-fu, Southern Shantung. Both had the princely family Ts'ao. According to Tu Yü (Shï tsu p'u), Chu^{1} was extinguished 6 generations and Little Chu^{1} 8 generations after the year 481.

C 24. Chung. »The descendant of 陸○ Lu-X, prince X of Chu^{1}. . .». K'ia 1: 21, Kuo 228, drawing T'ao 1: 15, our Pl. LVIII.

Wang Kuo-wei (Kuan t'ang tsi lin 18) adduces the Ti hi p'ien of the Ta Tai li, where it is said that the first ancestor of the clan 曹 Ts'ao was a certain 陸終 Lu Chung. Now the house of Chu^{1} had the clan name Ts'ao, and so the Lu-X of our inscription must be Lu Chung. This is quite plausible. Kuo Mo-jo's endeavour to identify the name of the prince here is, on the contrary, quite impossible.

C 25. Chung. »In the 1st month, 1st quarter, on the day yi-hai, prince 牼 K'eng of Chu^{1} made . . .». Cheng 1: 16, Kuo 226; drawing Huaimi, Hia 2, and T'ao 1: 16, our Pl. LVIII, and Lianglei 3: 4.

Prince K'eng of Chu^{1} (Süan kung) died in 556 B. C., see Ch'un ts'iu, Siang 17th year.

C 25 a. Li. »The prince of Chu^{1} made. . .». K'ia 17: 8, photo Shïerkia 3: 3.
C 26. Chung. »The 大宰 *t'ai-tsai* of Chu^{1}. . .». Sükia 17: 24, drawing *ibid.*

Chu^{4} 鑄.

The state Chu^{4} was situated in Fei-ch'eng-hien of T'ai-an-fu, Western Shantung; or, according to others, in Ning-yang-hien of Yen-chou-fu, South Western Shantung.

C 27. Fu. »The prince of Chu^{4} made for 孟妊 the Lady Eldest sister Jen. . .». Chengsung 6: 31, Tahi 242; drawing Kukien 29: 3, 29: 4 (two vessels).
C 27 a. Fu. »子叔黑臣 Tsï shu Hei-i of Chu^{4} made. . .». Chengsung 6: 29, photo Shïerkia 6: 9. Found in Sin-ch'eng of Tsi-nan-fu, Shantung.
C 27 b, c.* Ting, Chengsung 3: 10, Tahi 243; Sü, Chengsung 6: 39; both with the same inscription as C 27 a.

Ch'u 楚.

The state Ch'u was situated first in Tan-yang, of I-ch'ang-fu, Western Hupei, from 689 in King-chou-fu, Central Hupei, from 515 there was a period of residence in I-ch'eng-hien of Siang-yang-fu, Northern Hupei; in 278 the residence was removed to Ch'en-chou, East Central Honan, and in 241 to Shou-chou, North Western Anhuei.

C 28. Chung (Po). »In the 8th month, on the day kia-shen, prince 逆 I of Ch'u himself made. . .». K'i 18: 28, Tahi 191; photo Mengwei, Shang 2.

This bell was found in Sung time in Kia-yü-hien near Wu-ch'ang (Chao Ming-ch'eng, Kin shï lu). Sun I-jang has identified 逆 I with the prince 咢 O, who is mentioned in the Shï ki, Ch'u shï-kia, as having reigned in Ch'u 799—791 B. C. The ancient sounds of I (*ngi̯ak*) and O (*ngâk*) make this possible, but it remains a guess.

C 29. Fu. »In the 8th month, 1st quarter, on the day keng-shen, prince X of Ch'u cast. . .». Chengsung, Sü chung 1, Tahi 193; drawing T'ao 2: 44, 45, our Pl. LVII.
C 30. Chung. »In the 1st month, 1st quarter, on the day ting-hai, the king of Ch'u made a bridal vessel for 仲嬭 the Lady Second sister Mi of Kiang. . .». 芈 Mi was the clan name of the house of Ch'u; our Mi here must be a variant of that. Tahi 196, drawing K'ao 7: 12.
C 31. Chung. Same inscription as C 30. Drawing Shan 1: 12.
C 32. Urn. »The prince of Ch'u made. . .». Shan 3: 41, drawing *ibid.*
C 33. Ting. »King 酓忎 Yin Han of Ch'u took as booty in war metal for weapons. . .». Kuo Mo-jo, Hueik'ao sü, photo *ibid.*, better in Shïerkia 1: 2.

That 酓 Yin of the inscriptions is equal to 熊 Hiung of the literary sources, the first syllable in the names of various princes of Ch'u, is absolutely certain. 熊 was an arch. *g'i̯um*. 酓 has several dictionary readings, corresponding to arch. *'i̯ɛm*, *χəm* etc. Kuo Mo-jo is decidedly right in identifying the prince here as 熊悍 Hiung Han of the Shï ki, i. e. Yu wang (237—228 B. C.). This vessel was found in Shou ch'un, Shou-hien, in Anhuei, the capital of Ch'u from 241 B. C. A P'an (plain, with no distinctive features) with the same inscription is given in photo Shïerkia 10: 25.

C 33 a. Fu. »King Yin (=Hiung) 肯 (?) X of Ch'u made. . .». 3 vessels, photo Shïerkia 10: 18 ff. Kuo, Hueik'ao sü 38, mentions a Ting with the same inscription; the decoration there illustrated is a Huai pattern.

A lively discussion has been carried on regarding the identification of this king (Kuo Mo-jo, T'ang Lan, Liu Tsie, Shang Ch'eng-tso) but so far with no reliable result.

C 34. Set of Chung. »Prince X of Ch'u himself has made. . .». K'i 9: 5; photos Senoku Betsu 5—7, our Pl. XLVIII; Tch'ou XXIII, our Pl. LV; drawing T'ao 1: 17, our Pl. LI.
C 35. Tray. »王子申 The King's son Shen made for 嘉嬭 the Lady Kia Mi. . .». K'i 18: 23, Tahi 197; drawing Lianglei 8: 1 our Pl. LVII.

That this is a vessel from Ch'u is proved by the ductus of the script and the Ch'u clan name Mi. Yüan Yüan identifies this Shen with 公子申 Kung tsï Shen, *alias* 子西 Tsï Si, son of P'ing wang of Ch'u (528—516 B. C.), but there was also a kung-tsï Shen who was killed in 571 B. C. (Ch'un ts'iu, Siang 2nd year), and no safe identification is possible. That the vessel is from the 6th century seems certain.

C 36. Tray. »Vessel of 王子嬰次 the King's son Ying-ts'ï». Chengsung 11: 3, Tahi 216; photo in Ch'uan ku pie lu (publication about the Sin-Cheng finds).

This vessel was among the famous Sin-Cheng finds, and its inscription has been discussed by several authors. There can be no doubt that Wang Kuo-wei (Kuan

t'ang tsi lin 18) is right in identifying Ying-ts'ï here with the common name 嬰齊 Ying-ts'ï. Wang holds that the Ying-ts'ï of this inscription is the Ying-ts'ï, *alias* 子重 Tsï Chung of Ch'u who was a younger brother of Chuang wang of Ch'u, and that the vessel was left behind in Cheng after the great battle of Yen-ling (575 B. C.), when the army of Ch'u had to escape by night. Kuo Mo-jo, on the contrary, thinks that it is the 鄭子 Cheng-tsï in Cheng, who ascended the throne in 693, and who is called 子嬰 Tsï Ying by Sï-ma Ts'ien, but 嬰齊 Ying-ts'ï by Pan Ku (Ku kin jen piao). This is very ingenious, for it would explain the appearance of this vessel in Sin-Cheng. But there are the difficulties of the term *wang tsï* 'king's son', and of the decidedly Southern type of the script. Both facts point to a Ch'u origin, so we incline to accept Wang Kuo-wei's view.

C 37. Chung. »益公 I kung made for the house of Ch'u...». Kün 2:1:1, drawing Ch'angan 1:1.
C 38. Hu. »In the King's 26th year 聖起之夫人曾姬 the consort of Sheng Huan, the Lady Tseng Ki¹...». Hueik'ao sü, drawing Shan 4:54, 4:55 (two vessels).

The vessels were found in Shou-chou, and the script type is that of Ch'u. So the vessels must be attributed to the Ch'u group. The date »the King's 26th year» must refer to a Ch'u reign; it is practically excluded that Ch'u would date by the years of the Chou king. Since neither Yu wang of Ch'u (237—228) nor K'ao-lie wang (262—238) had as many as 26 years, the vessel cannot be later than 275 B. C. (26th year of K'ing-siang wang), but very well earlier.

C 39. Ih. »In the King's 1st month, 1st quarter, on the day keng-wu, Hiung of Ch'u made...». Our Pl. XLV. Cf. Yetts, Burlington Art Magazine 1930, 2; the vessel belongs to Mrs. Sedgwick.
C 40. P'an. Same inscription as C 39, our Pl. XLIV. Belongs to Mrs. Sedgwick.

Han² 韓.

The residence of this Han² at the time of C 41 was in Huai-k'ing-fu, North Western Honan.

C 41. Set of Chung. The Piao bells. This is the famous set of 14 bells, 12 of which are reproduced by drawings in Shan 1:24—35, and by photos in Sü Chung-shu, Piao shï pien chung t'u shï. Cf. my article »On the date of the Piao bells» BMFEA VI. The bells are dated 550 B. C.

Han¹ 寒.

This state Han¹ was situated in Wei-hien of Lai-chou-fu, Eastern Shantung. It is said to have existed already before Chou time (Tso chuan, Siang 4). That it was a feudal state in Chou as well follows from the clan name Sï.

C 42. Ting. »... the scribe ... X made for 寒姒 the Lady Sï of Han¹...». Kün 2/2:80, ill. Chengts'iu 7.

Hi 戲.

The state Hi was situated in Cheng-chou, Central Honan.

C 43. Li. »The prince of Hi made...». Kün 2/2:10, photo Senoku I:8.

Huang 黃.

This state was situated in Kuang-chou, South Eastern Honan; it was extinguished by Ch'u in 648 B. C.

C 44. Ting. »The scion of the house of Huang, the Lord of X 叔單 Shu Tan, himself made...». Kün 2:3:1, Tahi 202; photo Paoyün 23, also drawing Süyi 1:24. The wording seems to indicate that the vessel was made after the extinction in 648.

Hü 鄦 (= 許).

This state was situated first in Hü-chou-fu, Central Honan, then, from 576, in Shê-hien of Nan-yang-fu, South Western Honan. Revived after a first extinction in 504, Hü still existed at the end of the Ch'un ts'iu period 481 B. C. It is not known at which time afterwards it was extinguished by Ch'u.

C 45. Chung. »In the 1st month, 1st quarter, on the day ting-hai, prince X of Hü...». Kuo 208, drawing K'ao 7:7.
C 46. Fu. »In the 1st month, 1st quarter, on the day ting-hai, prince X of Hü...». K'i 5:26, Tahi 208, drawing Shan 9:10, our Pl. LVII.

Jo 鄀 (若).

This state was situated between Si-ch'uan and Nei-hing of Nan-yang-fu, South Western Honan. Ch'u moved its capital to Jo in 504 B. C., so at that time the state Jo was already extinguished. C 47—49 must be anterior to that date.

C 47. Chung. »Prince 叔 ○ Wu-X of Jo...». Chengsung 1:5, drawing Shan 1:14.
C 48*. Kuei. »In the 2nd month of Jo, 1st quarter, on the day yi-ch'ou, prince 叔人 Wu-jen of Jo made...». Kün 3/1:23, Tahi 198.
C 49. Hien. »The prince of Jo made...». Shan 3:36, drawing *ibid.*
C 50. Ting. »The mother from Jo made...». K'ia 12:2, drawing Ch'angan 1:4.

Juei 芮 (內).

This is always written 內, and it might seem doubtful whether 內公 does really mean 芮公 'the prince of Juei'. But this is confirmed by C 60 ff. 內大子 which must mean 'the Crown prince of Juei', and by C 230 below: 內子仲 Tsï-chung from Juei, where 內 (芮) is clearly the name of a country. Juei was situated in Ch'ao-i of T'eng-chou-fu, East Central Shensi. It was extinguished by Ts'in in 640 B. C., according to the Shï ki, so the vessels C 51—64 must all be anterior to that date.

C 51. Chung. »The prince of Juei made...». Ningshou 14:4, drawing *ibid.*
C 52. Chung. »The prince of Juei made...». Chengsung, Sü shang 1, drawing Kukien 36:6.
C 53. Ting. »The prince of Juei made...». Chengsung, Sü shang 21, drawing Kukien 2:8.
C 54. Ting. »The prince of Juei made...». K'ia 6:5, drawing Kukien 3:19.
C 55. Li. »The prince of Juei cast for the Consort of the house of King, 叔姬 the Lady Third sister Ki¹...». K'ia 17:10, drawing Heng 96, our Pl. L, also drawing Kukien 31:1.
C 56. Kuei. »The prince of Juei made...». Chengsung 5:13, drawing Kukien 27:8, 27:9 (two vessels).

C 57. Hu. »The prince of Juei made...». Chengsung 7:28, drawing Kukien 19:5.
C 58. Fu. »The prince of Juei made...». K'ao 3:40, drawing *ibid.*
C 59. Hu. »The prince of Juei made for 釐公 Li kung...». T'ao 3:1, drawing *ibid.*; photo Shū Kan 15.
C 60. Ting. »內大子白 the Crown prince Po of Juei made...». Kukien 2:24, drawing *ibid.*
C 61. Hu. »The Crown prince Po of Juei made...». Wuying 102, photo *ibid.*
C 62. Hu. »The Crown prince Po of Juei made...». Sükia 8:41, drawing *ibid.*
C 63. Fu. »The Crown prince Po of Juei made...». Kün 2/2:11, drawing Lianglei, 7:9.
C 64. Ting. »The crown prince of Juei made...». Shuangkien 8, photo *ibid.*, our Pl. XXXIV.

Kao 郜.

This was a state given in fief to a son of Wen wang, situated in Ch'eng-wu-hien of Ts'ao-chou-fu, Western Shantung; since, however, there were also, in feudal times, two cities with the same name, one in Sung and one in Tsin, we cannot be quite certain of the origin of C 65.

C 65. Ting. »史碩父 the scribe Shï-fu og Kao made...». Chengsung 3:16, drawing Shan 2:70.

Ki 紀 (己).

The name is written 己 in the inscriptions. That this is equal to 紀 and not to 杞 is proved by C 66. The state 紀 Ki was situated in Shou-kuang-hien of Ts'ing-chou-fu, North Central Shantung, and the bell C. 66 was found there, (see K'ia 2:8) below a terrace called 紀侯臺 »the terrace of the prince of Ki». Ki was extinguished by Ts'i in 690 B. C., so C 66, 67 must be anterior to that date.

C 66. Chung. »Prince X of Ki made...». K'i 9:2, photo Senoku Betsu 4, our Pl. XLVIII.
C 67. Kuei, lid. »Prince 貉子 Mo-tsï of Ki set apart for 己姜 the Lady Kiang of Ki...». K'ia 11:25, photo Mengwei, Sü 20. The lid now belongs to the MFEA. Our Pl. XXVII.

K'i 杞.

This state was situated first in K'i-hien of K'ai-feng-fu, North Eastern Honan, later in several successive places in Ts'ing-chou-fu, North Central Shantung. It was extinguished by Ch'u in 445 B. C., so the vessels C 68—72 must be anterior to that date.

C 68. Ting. »The prince 每 ○ Mei-X of K'i made for 朱嫀 (= 邾曹) the Lady Ts'ao of Chu...». Chengsung 3:5, Tahi 241. ill. Chengts'iu 5.
C 69. Hu. The same inscription as C 68. K'ia 14:12, drawing Shan 4:52.
C 70. Kuei. The same inscription as C 68. Chengsung 5:19, photo Shïerkia 5:16.
C 71.* Ih. The same inscription as 68. Chengsung 10:36.
C 72.* Bowl. The same inscription as C 68. Kün 2/2:51.

K'un-i 昆夷.

K'un-i were Jung »Barbarians» of Western Shensi, evidently early drawn into the sphere of Chinese culture.

C 73. Chung. »The king of K'un-i using cowries made...». Lo Chen-yü, Yung feng hiang jen kao, k. 4, p. 1, photo Mengwei, Sü 1, our Pl. XLVII.

Kuo 虢.

There were several Kuo, the principal ones of which were Eastern Kuo, in Sï-shuei-hien of Ch'eng-chou, North Central Honan, extinguished by Cheng already before the beginning of the Ch'un ts'iu era (722); and Western Kuo, first in Pao-ki-hien of Feng-siang-fu, Western Shensi, from 770 in Shan-chou (Shan-hien) of North Western Honan, extinguished by Tsin in 655.

C 74. »X, son of 文公 prince Wen of Kuo, made for 叔妃 the Lady Third sister Ki³...». T'ao, Sü shang 20, drawing *ibid*, also Huaimi, Hia 5, photo Mengwei, Shang 13.

Wen kung of Kuo occurs in Shï ki (Chavannes I, 276). He is there said to have been contemporaneous with Süan wang of Chou (827—782); the earliest support for this is furnished by the Kuo yü (Chou yü), which tells us how Kuo Wen kung remonstrated with King Süan. Our vessel thus must be dated around 800 B. C.

C 75.* Li. The same inscription as 74. Chengsung 4:14.
C 76. Li. 虢仲 Kuo chung made for the Lady Ki³ of Kuo...». K'i 18:21, drawing Huaimi, Hia 20. For Kuo chung »Second brother from Kuo», a common name carried by various persons, see p. 51 above.
C 77. Kuei. 城虢仲 Kuo chung of the Walled Kuo has made...». K'ia 10:13, drawing Heng 37.
C 78. Kuei. 虢叔 Kuo shu made». K'ao 4:27, drawing *ibid.*

Kuo shu »Third brother from Kuo» is just as little telling as Kuo chung. There was a Kuo shu already in Wen wang's time; another, Kuo shu Lü, occurs in B 94 above; one Kuo shu is mentioned in Tso chuan in the year 722, and one in the year 674 B. C. The present person cannot be identified.

C 79. Li. »Kuo shu made...». K'ao 2:6, drawing *ibid.*
C 79 a. Li. »Kuo shu made...». Photo Shïerkia 7:9.
C 80. Kuei. »[illegible] Tsu, 虢季氏子 son of the house of Kuo ki, has made...». Kün 2/2:70, drawing T'ao, Sü shang 35, our Pl. XXXVIII. Belongs to the Victoria and Albert Museum, London. For Kuo ki »Youngest brother from Kuo» see B 107 above.
C 81. Hu. Same inscription as C 80. K'ia 14:10, drawing Lianglei 7:5.
C 82. P'an. »In the 11th year, 1st month, 1st quarter, on the day yi-hai, Tsu, son of the house of Kuo ki (as C 80), made...». Photo Shuangyü 10.
C 83. Hu. Same inscription as C 82. Photo Shuangyü 15, also in Ishu 21, our Pl. XLVI.

Lu 魯.

This state was situated in K'ü-fou-hien of Yen-chou-fu, South Western Shantung; it was annexed by Ch'u in 249 B. C.

C 84. Chung. »原 Yüan of Lu made...». K'i 18:27, drawing Huaimi, Hia 1.
C 85.* Kuei. »The *t'ai-tsai* 原父 Yüan-fu of Lu made for 季姬 the Lady Youngest sister Ki¹...». K'i 16:34, Tahi 239.

C 86. Kuei. »The *si-t'u* 伯 吳 ○ Po-wu-X of Lu made...». Chengsung 5: 18, drawing Shan 9: 14.
C 87. Ting. »內 小 臣 the *siao-ch'en* of the Inner Palace of Lu made...». K'ia 6: 14, drawing P'anku, Shang 18.
C 88. Fu. »伯 俞 父 Po Yü-fu of Lu made...». Kün 2/2: 33, drawing Shan 9: 4 and Lianglei 7: 10.
C 89.* (Li), **90*** (Ih), **91*** (P'an). »Po Yü-fu of Lu made for 邾 姬 the Lady Ki[1] of Chu[1]...». Chengsung 4: 8, 10, 35, 10: 25 resp.
C 92. Kuei. »士 商 戱 the nobleman Shang-cha of Lu made ..». Kün 2/3: 56, Tahi 241, drawing 28: 4.
C 93. P'an. »正 叔 Cheng shu of Lu...». Po 21: 15, drawing *ibid.*
C 94. P'an. »伯 厚 父 Po Hou-fu of Lu made for the Lady second sister Ki[1]...». K'ia 16: 16, drawing Huiaimi 21.
C 95. Fu. »The nobleman X-fu of Lu made...». K'i 5: 21, drawing Shan 9: 1, 9: 2 (two vessels), our Pl L.
C 96. Kuei. »伯 大 父 Po Ta-fu of Lu made for 孟 ○ 姜 the Lady Eldest sister X Kiang...» Kün 2/2: 71, photo Paoyün 64, also drawing Kukien 12: 32.
C 97. Kuei. »Po Ta-fu (as in C 96) of Lu made for 仲 姬 the Lady Second sister Ki[1]...». Kün 2/2: 71, Tahi 240, drawing Shan 8: 68.

Lü 呂 (邵).

State situated in Huo-chou, South Central Shansi.

C 98. Chung. »In the King's 1st month, 1st quarter, on the day ting-hai, 邵 X of Lü said: I, the grandson of 畢 公 the prince of Pi, the son of 邵 伯 the prince of Lü...». Chengsung 1: 18, Tahi 269, photo Eumorfopoulos II: 1 our Pl. LV, drawings P'anku, Shang 1—4, Heng 2, Shan 1: 36, 37. Western commentaries Yetts Eum. Cat. II, p. 43 and Pelliot, T'oung Pao XXVII, p. 393.

This was a set of 12 or 13 bells, found in 1862 in Jung-ho-hien of P'u-chou-fu in Shansi. This find-place shows that 邵 cannot (with Wu Ta-ch'eng, K'ia) be 莒 Kü, but must be equivalent to 呂 in Southern Shansi, as shown by Wang Kuo-wei (Kuan t'ang tsi lin 18). 畢 萬 Pi Wan was enfeoffed with 魏 Wei in 661 B. C., and according to Shï ki it was his grandson Wei Tao-tsï who removed the residence to Huo (close to Lü). Tso chuan (Süan 12 etc.) mentions a grandson of Pi Wan, called 魏 錡 Wei K'i, alias 呂 錡 Lü K'i. His son was 魏 相 Wei Siang alias 呂 相 Lü Siang. Whether it is allowable to identify — following Wang Kuo-wei — Wei Tao-tsï with Wei (Lü) K'i, seems very uncertain (cf. Pelliot). It is certain, however, that the family removed to Honan in 340 B. C. The bells must therefore be anterior to 340, and posterior by at least two generations to Pi Wan (enfeoffed in 661), the founder of the Wei house, which sometimes was called 呂 Lü after this region, where it resided periodically. A more precise dating is hardly practicable.

Man 𨚗, 曼.

Wu Ta-ch'eng (K'ia) points out that on the one hand the clan name of the House of 鄧 Teng was 曼 Wan, on the other hand, Tso chuan (Cheng 3rd year) mentions a city 鄤 Man in Cheng. That the Man of the inscriptions is a city name is evident.

C 100. Ting. »師 Shï (the master?) made for 𨚗 仲 Man chung (»Second brother from Man»)...». K'i 1: 13, photo Mengwei, Shang 9, drawing Ningshou 1: 27.
C 101. Kuei. Same inscription as C 100; photo Mengwei, Shang 22.
C 102. Kuei. »曼 龏 父 Kung-fu of Man made...». K'i 3: 32; drawing Huaimi, Hia 27, also Lianglei 7: 12 and T'ao, Sü shang 44.

Mao 毛.

This state is said to have been situated close to I-yang-hien, North Western Honan (somewhat uncertain).

C 103. Kuei. »Prince 𠬝 父 Lie-fu of Mao made for 仲 姚 the Lady Second sister Yao...». Photo Paoyün 72, our Pl. XXXIX, also drawing Süyi 12: 16.

Mei 微.

Liu Sin-yüan proposes that this is the 郿 Mei of the Tso version of Ch'un ts'iu (Chuang 28), which is written 微 by both Kung-yang and Ku-liang. Mei was a city in Lu, to the West of Tung-ping-chou of T'ai-an-fu, West Central Shantung. The identification is very uncertain; that we have here, however, the name of a feudal state is obvious.

C 104. Ting. »In the King's 5th month, 1st quarter, on the day ting-hai, the prince of Mei and 仲 父 Chung X-fu attacked the Southern Huai I Barbarians...». K'i 16: 20, drawing Po 3: 16.
C 105. Ting. »惠 Huei made for the prince of Mei and the Lady 妘 Yün..Po 3: 23, drawing *ibid.*

Pei 邶 (北).

This state was situated to the North East of Wei-huei-fu, Northern Honan.

C 106. Yu. »Prince X of Pei made...». Chengsung 8: 23, photo Umehara I: 77.

Pi 畢.

Pi was situated in Hien-yang-hien of Si-an-fu, Central Shensi.

C 107. Li. »Po-X-fu has made for 畢 姬 the Lady Ki[1] of Pi...». Chengsung 4: 14, drawing T'ao 2: 52, our Pl. XXXVI. There were five Li in the set with this inscription; one is now in the MFEA, Stockholm.

P'o 番.

It is doubtful what state or sub-state this P'o was. It might be the P'o which belonged to Ch'u: Shï ki, Wu shï kia (Chavannes IV, 24) says that 504 B. C. a Wu army took the city 番 P'o of Ch'u; in Ch'u shï kia this event is dated in 505. I do not know why Chavannes reads P'an; the correct reading of the character in this sense is surely P'o.

C 108. Li. »番 君 the ruler of P'o, X po, himself made...». K'ia 17: 12, drawing T'ao, Sü shang 46; also Shan 3: 24.
C 109. Ting. »番 仲 吳 生 P'o chung Wu sheng (»Second brother from P'o, Wu-sheng») made...». Kün 2/2: 59, drawing Shan 2: 66.

Shao 召 (𨗨).

This state was situated in Feng-siang-fu, Western Shensi.

C 110. Hien. »The great scribe Yu made for the prince of Shao...». Kün 2/1: 42, photo Senoku I: 11.
C 111. Tsüe. »鬲 Ho made for the prince of Shao...». K'i 5: 16, drawing Shan 7: 53.
C 112.* Ting. Same inscription as C 111. Choichai 4: 9.
C 113. Li. »召 仲 Shao chung (»Second brother from Shao») made...». K'ia 17: 13, drawing Heng 94, also Ch'angan 1: 25 and P'anku, Shang 51.
C 114. Hu. »召 仲 丁 父 Shao chung Ting-fu himself made. .». Po 12: 14, drawing *ibid.*

Shï 邿.

This state was situated in Tsi-ning-chou, Southern Shantung. It was extinguished by Lu in 560 B. C. C 115 therefore must be anterior to that date.

C 115. Ting. »The prince of Shï made for 孟 妊 the Lady Eldest sister Jen...». Kün 2/2: 58, Tahi 233; photo Paoyün 25, also drawing Süyi 1: 47.
C 116. Kuei. »遣 K'ien of Shï made...». K'ia 9: 2, Tahi 234; drawing Shan 8: 73, also Sükia 12: 37.

Sie 薛 (𨞄).

This state was situated in T'eng-hien of Yen-chou-fu, South Western Shantung.

C 117. P'an. »The prince of Sie made for 叔 妊 the Lady Third sister Jen...». Kün 2/2: 85, Tahi 225, drawing T'ao 3: 38.

Su 蘇 (穌).

This state was situated in Wen-hien of Huai-k'ing-fu, Northern Honan. The clan name of the house of Su was Ki[3], which is affirmed by the Kuo yü (Tsin yü), where it is said: »Sin of Yin attacked the prince of Su; the prince of Su gave him for wife 妲 己 Tan (Ta) Ki[3].

C 118. Kuei. »The prince of Su made for 王 妃 the Consort of the King, the Lady Ki[3]...». K'i 3: 8, Tahi 211, drawing Heng 32.
C 119. Kuei. »公 子 癸 父 甲 prince Kuei-fu Kia of Su made...». Chengsung 5: 29, Tahi 212, photo Paoyün 66, also drawing Süyi 12: 37.
C 120. Ting. »In the 1st month, 1st quarter, on the day jen-shen, the grandson of the prince of Su...». Chengsung 3: 24, Tahi 212, drawing Shan 2: 77, our Pl. LVII.
C 121. Ting. »○ 妊 the Lady X-Jen of Su made for 虢 妃 魚 母 the Lady Ki[3] Yü-mu of Kuo...». Kün 2/2: 23, Tahi 214; photo Mengwei, Shang 11, our Pl. XXXIII.
C 122.* P'an. Same inscription as C 121. Chengsung 10: 27.
C 123. Ting. »蘇 衛 妃 the Lady Ki[3] of Su, married in Wei, made...». Chengsung 2: 41, ill. Chengts'iu 3; also drawings Heng 15, Ch'angan 1: 8, T'ao, Sü shang 19.

Sung 宋.

This state was situated in Shang-k'iu-hien of Kuei-tê-fu, Eastern Honan. It was extinguished by Ts'i in 286 B. C.

C 124. Set of 6 Chung bells. »Bell of prince 戍 Sü of Sung». Kün 1/3: 38, Tahi 220; drawings Po 22: 27 ff. Our Pl. LVIII.

Sung kung Sü was P'ing kung (575—532 B. C.). Kuo Mo-jo, Tahi 220, reads 成 Ch'eng instead of 戍 Sü; Wu Shï-fen and Wang Kuo-wei read Sü, following Yüan Yüan. The graph is really Sü. The variant is ancient: Ch'un ts'iu (Chao

10th year) in the Tso version calls him prince 成 Ch'eng, in the Kung-yang version prince 戍 Sü. Kung-yang adds that Sü is a pun for 恤 'clement'. From an historical point of view the incertitude of reading is immaterial: whether read Ch'eng or Sü the inscription refers to the said P'ing kung, and the bells are fairly closely datable.

C 125. Ting, lid. »The tripod of prince 樂 Luan of Sung». Tahi 221, drawing Po 3: 35.

Luan of Sung was 景 公 King kung (516—451), see Tso chuan, Chao 20th year.

C 126. Ting. »The grandson of prince X of Sung, the 走 馬 亥 *tsou-ma* Hai made...». K'ia 5: 16, Tahi 219; drawing Ch'angan 1: 11, our Pl. LVI.
C 127. Ting, lid. »The . . . . tripod of the princely consort of Sung...». Po 3: 37, drawing *ibid.*

Sü 徐 (郐).

This state was situated in Sü-chou of Northern Anhuei. It was extinguished by Wu in 512 B. C., so the vessels C 128—132 cannot be later than the 6th century.

C 128. Ting. »King X of Sü used...». Chengsung 3: 21, Tahi 189; drawing Shan 2: 74, our Pl. LVI.
C 129. Chung. »The virtuous son Yüan-er of King 庚 Keng of Sü...». K'ia 2: 19, Tahi 184; drawing T'ao, Sü shang 5, our Pl. LVII.
C 130. Chung. »The great-grandson 僕 兒 Ch'ou-er...; I, the good servant of 義 楚 I-ch'u...». K'i 9: 14, Tahi 186, rubbing K'i 9: 14. This I-ch'u must be the same as in C 131 below, which gives the date.
C 131.* Chï. »In the 1st month, on an auspicious day, the day ting-yu, 義 楚 I-ch'u, king of Sü, selected...». K'i 17: 36, Tahi 188.

Found in Kao-an, Kiangsi. Tso chuan, Chao 6th year (536 B. C.) says: »儀 楚 I-ch'u of Sü made a visit of friendly inquiries in Ch'u». The commentator Tu Yü says I-ch'u was a dignitary in Sü; here we learn that he was a prince of Sü.

C 132. Chï. »The sacrificial vessel of I-ch'u (as in C 131)». K'i 17: 36, photo Shuangyü 17, also drawing Shan 5: 93.

Tan or Shan 單.

This state was situated close to Royal Chou in North Western Honan.

C 133. Li. »Prince 原 父 Yüan-fu of Tan made for 仲 姞 the Lady Second sister Ki[2]...». Kün 2/2: 85, drawing Ch'angan 1: 24, our Pl. L.
C 134. P'an. »子 伯 Tsï po from Tan made...». Photo Shuangyü 11.

Teng 鄧 (𨙶).

This state was situated to the North of Siang-yang-fu, Northern Hupei, or, according to others, in Teng-chou to the South of Nan-yang-fu in Southern Honan (it practically comes to the same). It was extinguished by Ch'u in 678 B. C., so C 135 must be anterior to that date.

C 135. Kuei, lid. »In the 9th month of Teng, 1st quarter . . . the prince of Teng...». Tahi 207, photo Mengwei, Sü 21, drawing T'ao 2: 18.

C 136. Ting. »In the 8th month of Teng, 1st quarter...». Tahi 206, photo Mengwei, Shang 12, drawing T'ao 1: 29.
C 137. Hu, lid. »孟 Meng from Teng made for ○ 姬 the Lady X-Ki[1]...». Tahi 206, photo Mengwei, Sü 25, drawing T'ao 3: 3.

T'eng 滕 ([illegible]).

This state was situated to the South West of T'eng-hien of Yen-chou-fu, South Western Shantung.

C 138. Kuei. »虎 Hu of T'eng presumes to make...». Chengsung 4: 45, Tahi 225 photo Mengwei, Shang 27.

Wang Kuo-wei (Kuan t'ang tsi lin k. 6) wants to identify this Hu with a certain 孟 虎 Meng Hu mentioned in Li ki, T'an kung. This is, of course, a guess without the slightest value.

Ts'ai 蔡 ([illegible]).

This state was situated in Shang-ts'ai-hien of Ju-ning-fu, South Eastern Honan.

C 139. Tsun. »Po made for the Lady Ki[1] of Ts'ai...». Kün 2/2: 5, ill. Chengts'iu 27, our Pl. XXXI.
C 139 a. Ih. »子 佗 Tsï-t'o of Ts'ai himself made...». Photo Shïerkia 6: 17.

Tseng 鄫 (曾).

This state was situated in Yi-hien of Yen-chou-fu, South Western Shantung. It was extinguished by Kü in 567 B. C., so C 140, 141, 143, 144 must be anterior to that date.

C 140. Hu. »Prince [illegible] I of Tseng used...». Chengsung 7: 33, Tahi 223, our Pl. XXXV.
C 141. Fu. »In the King's 9th month, 1st quarter, on the day keng-wu, prince X of Tseng ... vanquished the Ti Barbarians and the Huai I Barbarians...». K'i 5: 26, Tahi 221, ill. Tahi t'ulu 132.

Kuo Mo-jo, because of two place names (繁 and 湯), occurring both in this inscription and in C 172 below, wants to combine these two: Tsin and Tseng jointly attacked the Huai I. The grounds for this are much too frail.

C 142. Fu. »In the 1st month, 1st quarter, on the day ting-hai, Tsï-X of Tseng himself made...». Wuying 38, photo *ibid.*
C 143. Ting. »Prince X, 諸 子 son of a second-rank wife, of Tseng made...». Kün 2/2: 37, photo Shuangyü 8, also drawing Shan 2: 63, our Pl. XLIX.
C 144. P'en. »The 大 保 *t'ai-pao* of Tseng...». Chengsung 11: 8, Tahi 224; photo Shuangyü 13, drawing 9: 59, our Pl. LI.

Ts'i 齊.

This state was situated in Lin-tsï-hien of Ts'ing-chou-fu, North Central Shantung. From 378 B. C. its princely family had the name 陳 ([illegible]) Ch'en (to be distinguished from the state Ch'en above).

C 145. Bells. »In the King's 5th month, on the day mou-yin ... the prince said: .... in the place of the prince of Ts'i ...; ... to give service in the place of 桓 武 靈 公 Huan-wu Ling kung; Huan-wu Ling kung gave...». Tahi 243, drawings Po 22: 5, 11, 12, 13, 14, our Pl. LVIII (*bis*).

There was a set of one Po bell and four ordinary bells with the same inscription. Since the prince of Ts'i is repeatedly mentioned in this long inscription, Kuo must be right in identifying Huan-wu Ling kung with prince Ling of Ts'i (581—554). Huan-wu being additional laudatory epithets of a well-known and common type; we find it again on a Ts'i vessel C 168 below.

C 146. P'an. »The prince of Ts'i made as a bridal gift for ... 孟 姜 the Lady Eldest sister Kiang...». K'i 8: 14, Tahi 251; photo Tahi t'ulu 157.
C 147.* Tuei. Same inscription as 146. Photo Umehara III: 203, our Pl. LIV.
C 148. Ih. Same inscription as C 146. Ill. Ishu 23.
C 149.* Ting. Same inscription as C 146. K'i 6: 38.
C 150.* Kuei. Same inscription as C 146. K'i 3: 29.
C 151. »The prince of Ts'i made...». Shan 9: 18, drawing *ibid.* Our Pl. LVI.
C 152. Kuei. »The prince of Ts'i made...». Eumorfopoulos I; 36, our Pl. LIV.
C 153. P'an. »The prince of Ts'i made for 楚 姬 the Lady Ki[1] of Ch'u. Po 21: 13, drawing *ibid.*
C 154. Ih. »The prince of Ts'i made for 虢 孟 姬 the Lady Eldest sister Ki[1] of Kuo..» K'i 18: 26, drawing Huaimi, Hia 13, also Lianglei 7: 21.
C 155. Hu. »The daughter X of the prince of Ts'i ...; ... 洹 子 孟 姜 Huan-tsï and the Lady Eldest sister Kiang therefore pray for a fine charge...». K'i 18: 16, Tahi 254; drawing Huaimi, Hia 16, also Lianglei 4: 2, 5: 2.

The Chinese authors all seem to agree that the Huan-tsï mentioned was the 桓 子 (陳 無 宇) who was a high statesman in Ts'i during the reign of prince Chuang (553—548); but since there were several dignitaries 桓 子 Huan-tsï in Ts'i, no safe dating is possible.

C 156. Hu. ».... the three armies of Ts'i,...; to present it at the place of prince Ling...». Tahi 247, drawing Sükia 16: 9.

Prince Ling, though the graph has an additional rad. 113, must be the same Ling kung (581—554), as in C 145 above.

C 157. P'an. »In the King's 8th month, on the day ting-hai, 大 宰 歸 父 the *t'ai-tsai* Kuei-fu of Ts'i ... made...». K'i 8: 12, Tahi 252; drawing T'ao, Sü hia 17.

There were two prominent statesmen in Ts'i with the personal name Kuei-fu: 國 Kuo Kuei-fu, who is first mentioned in the Tso chuan under the year 649 B. C., and 析 Si Kuei-fu, who is first mentioned under the year 555. The name Kuei-fu thus tells us nothing — there may have been many of that name.

C 158. Chung. »In the King's 5th month, 1st quarter, on the day ting-hai, X, grandson of X shu .... of Ts'i, son of Tsi chung ...; ... august ancestor 聖 叔 Sheng shu and his august wife 聖 姜 Sheng Kiang ...; X shu had merits in the state of Ts'i...». K'ia 2: 21, Tahi 248; drawing P'anku, Hia 1.
C 159. Chung. »In the 9th month, 1st quarter, on the day ting-hai, Shou made for 叔 姜 the Lady Third sister Kiang ...; can serve the prince of Ts'i...». Sükia 17: 28, drawing *ibid.*
C 160. Chung. »[illegible] 父 Ch'ï-fu made for ... 姜 the Lady Kiang of Ts'i...». Po 22: 19, drawing *ibid.*, also K'ao 7: 5.
C 161. Fu. »陳 曼 Ch'en Man of Ts'i does not presume to ...; has made for his august father Hien shu...». Chengsung 6: 33, Tahi 257, drawing Kukien 29: 6. A round

lid with the same inscription in Shuangyü 10 is too badly photographed to be of any use.

C 162. P'an. »○ 姬 the Lady X-Ki of Ts'i...». Kukien 32: 37, drawing *ibid.*
C 163. Ting. »The ... scribe of Ts'i...». Po 3: 20, drawing *ibid.*
C 164. Li. »不 [illegible] Pu-X of Ts'i made...». Chengsung 4: 10, drawing Shan 3: 23.
C 165. Tan. »In the year when 國 差 Kuo-X started an expedition ...; ... the state of Ts'i...». K'i 18: 21, Tahi 253; photo Paoyün 91, also drawing Süyi 16: 9.

An old interpretation that 國 差 is equal to 國 佐 Kuo Tso, a Ts'i statesman who was killed in 573 B. C. (Ch'un ts'iu, Ch'eng 18) has been doubted by Jung Keng (Paoyün) but is probably right.

C 166. Kuei. »In the 14th year, prince 午 Wu of Ch'en with the aid of all the princes...». Chengsung 5: 42, Tahi 258; photo Paoyün 74, our Pl. XLII, also drawing Süyi 12: 44.

Ch'en hou, prince Wu of Ch'en is prince 桓 Huan of Ts'i, of the Ch'en (T'ien) family, and the 14th year is 371 B. C. It is true that the Shï ki (T'ien King chung shï kia) gives Huan only 6 years of reign (384—379), but the So-yin (*ibid.*) quotes the Chu shu ki nien so as to show that he had at least 18 years; the following reign (Wei) must have been given too long (378—343) in the Shï ki. So the date 371 is reliable.

C 167. Tuei. Same inscription as C 166. Photo Wuying 79.
C 167 a. Tuei. Same inscription as C 166. Photo Shïerkia 5: 13.
C 168. Tuei. »In the ... 6th month, on the day kuei-wei, prince 因 [illegible] Yin-ts'ï of Ch'en said ... my august father 孝 武 [illegible] Hiao-wu Huan kung...». K'i 4: 13, Tahi 259; drawing Shan 2: 82.

Prince Yin-ts'ï is Wei wang (因 齊, dead 343 B. C.). He calls his father Huan kung (see C 167 above) Hiao-wu Huan kung with additional laudatory epithets.

C 169. Kuei, lid. »In the King's 5th month ... on the day ting-hai, [illegible] Fang(?) said: I, the grandson of Ch'en chung X, ○ 叔 和 子 X shu Ho-tsï...». Kün 3/1: 21, Tahi 256; drawing Shan 8: 81.

Since Ch'en is written [illegible], we can know that it is of late Ts'i time.

C 170. Hu. »In the King's 5th year, when 鄭 Cheng X and Ch'en [illegible] X for the second time made an expedition, in the 1st winter month, on the day mou-ch'en ...;. Ch'en 騂 Sing entered and attacked [illegible] Yen ... booty». Photo Umehara III: 213, Museum of Penn, Philadelphia.

Kuo Mo-jo has given a very good commentary of this inscription in Ku tai ming k'o huei k'ao. In all probability the »5th year» refers to 279 B. C. (Siang wang's 5th year), when, according to the Shï ki, there was a Ts'i war against 燕 Yen (for [illegible] equal to Yen see below).

Tsin 晉.

This state was situated in Southern Shansi; the successive capitals were all inside the prefecture of P'ing-yang-fu. Tsin was extinguished in 376 B. C.

C 171. An (bowl). »In the King's 1st month, 1st quarter, on the day ting-hai, the prince of Tsin said ...; ... my illustrious father ...; ... in the state of Tsin ...; my

eldest daughter ...; bridal vessel ...; ... to be consort in the state of Ch'u...». Kün 3/3: 28, Tahi 267; ill. Chou kin wen ts'un 4: 35, also Tahi t'ulu 163, our Pl. LVII.

Kuo adduces the version of the inscription as given in Ts'ung ku t'ang k'uan chï hüe 8: 14, where there are, after »my illustrious father», the words 文 公 Wen kung, and therefore dates it in Siang kung's (627—621 B. C.) reign; but in Kün 3/3: 28 and in Chou kin wen ts'un we can clearly see that this is wrong: the character is not 文. In Choichai k. 28: 7 it is argued that the prince of Tsin must be P'ing kung (557—532), since the inscription refers to the event narrated in Tso chuan under the year 538 (Chao 4), when the prince of Ch'u asked for, and was given, the daughter of the prince of Tsin to wife. This is quite possible, but of course by no means certain. A reliable dating is not possible. In any case the vessel is anterior to 376, after which year there was no Tsin kung.

C 172. Ting. »In the King's 9th month, on the day yi-hai, the Lady 姜 Kiang in Tsin said: I have succeeded my deceased aunt in ruling the state of Tsin ...; ... not to neglect the great charge of the prince 文 侯 Wen hou...». Tahi 266, drawing Po 2: 6. The vessel cannot be anterior to Wen hou (780—746).
C 173. Ting. »The *sï-t'u* 伯 [illegible] 父 Po Ko-fu of Tsin made for 周 姬 the Lady Ki[1] of Chou...». Po 3: 13, our Pl. XLIX.
C 174. Kuei. »In the 3rd month, 1st quarter, 格 伯 Ko po made for 姬 the Lady Ki[1] of Tsin...». K'i 3: 18, photo Shuangkien 16.

Ts'in 秦.

This state was first situated in Ts'in-chou of Eastern Kansu, then from 762 in several successive places in Feng-siang-fu, Western Shensi, and later spreading over the whole of Shensi.

C 175. Chung. »The prince of Ts'in said: my great illustrious august ancestors received the charge of Heaven ... twelve princes (*kung*) ...» Tahi 273, drawing K'ao 7: 9.
C 176. Kuei. »The prince of Ts'in said: my great illustrious august ancestors received the charge of Heaven ... twelve princes ...» Chengsung 6: 13, Tahi 272; photo Tahi t'ulu 127.

The date of these vessels is somewhat enigmatic, in spite of the fact that the prince speaks of twelve predecessors. It all depends upon how we count. If we reckon as the first prince the Feï-tsï who was given a subordinate fief in Hiao-wang's time, the present orator will be prince Ch'eng (663—660 B. C.). If we count the first real 公 *kung* duke, Chuang kung, as number one, then the prince of Ts'in of the inscription will be Huan kung (603—577); the latter alternative is certainly the most plausible.

Wei 衞.

This state was situated first in several successive places in Wei-huei-fu of Northern Honan, then from the end of the 7th century in K'ai-chou of Ta-ming-fu, Southernmost Hopei.

C 177. Li. »奴 the Lady Sï of Wei made...». Chengsung, Pu shang 16, drawing Shan 3: 21.
C 178. Kuei. »In the 9th month, 1st quarter, on the day keng-wu, 公叔 Kung-shu first had audience in Wei...». K'ia 9: 7, Tahi 262; drawing Shan 8: 49.
C 179. Fu. »子叔 ○ 父 Tsï shu X-fu of Wei made...». Kün 2/1: 29, drawing Ch'angan 1: 23.
C 180. Hu. »The *sï-k'ou* 良父 Liang-fu made for 姬 the Lady Ki[1] of Wei...». K'i 18: 11, Tahi 262; drawing Huaimi, Hia 14.
C 181. Fu. »商丘叔 Shang-k'iu shu made...». K'i 5: 22, drawing T'ao 2: 46, 2: 47 (two vessels).

According to the Feng su t'ung (Sing shï p'ien), a family of dignitaries in Wei had the city of Shang-k'iu as vassals under Wei. Shang-k'iu was also the name of the capital of Sung (see Tso chuan, Siang 9 with commentary). Since it is unlikely that Shang-k'iu shu should be a name founded on the princely city of Sung, the Shang-k'iu of Wei seems more likely here.

Wu 吳.

This state was situated in Ch'ang-chou and Su-chou of Southern Kiang-su. It was extinguished by Yüe in 473 B. C.

C 182. Chung. »In the 1st month, 1st quarter, on the day ting-hai, 者減 Chê-(Chu?) Kien, son of prince 皮 P'i-X of 工 (Kung-yü =) Wu selected...». Chengsung 1: 12, Tahi 177; drawing Shan 1: 17, our Pl. LVIII, also Sükia 17: 1—19 (there was a set).

That Kung-yü is equal to 句吳 Kou-wu, the earliest name of the state of Wu, is certain (Wang Kuo-wei, Kuan t'ang tsi lin Pie tsi 1: 1) That 句 in this name had the variant 工 is indicated by K'ung Ying-ta in his commentary to Tso chuan, Süan 8. 吳 and 虞 are interchangeable, and 吳 (Arch. *ngo*) and 魚 (Arch. *ngio*) had the same final.

Wang's and Kuo's endeavours to identify the prince P'i-X are on the contrary very little successful.

C 183. Kien bowl. »攻吳王夫差 Fu-ch'ai, king of Kung-Wu, selected...». Chengsung 11: 4, our Pl. LII. This magnificent vessel now belongs to Mr. H. G. Oeder and is deposited in the Museum für Völkerkunde in Berlin.

That we have to decipher: »Fu-ch'ai, king of (Kung-Wu = Kou-Wu =) Wu» and identify this person with the famous Fu-ch'ai who reigned 495—473 B. C. — the last ruler of Wu — has been proved by Wang Kuo-wei (Kuan t'ang tsi lin Pie tsi 1: 1), and this has been universally accepted by Chinese scholars. To our mind there cannot be the slightest doubt that he is right. The graph variants are such as could hardly have been imagined by a forger, so the authenticity of the inscription is certain.

C 184. Fu. »The chariot conductor of the king of Wu...». Sükia 13: 11, drawing *ibid.*
C 185. Kuei. »○父 X-fu of Wu made...». Chengsung 5: 30, Tahi 270; ill. Chengts'iu 17.

For purely formal reasons we have placed the last two vessels here. Kuo Mo-jo is very likely right when he proposes that 吳 Wu here is but a short-

form for 虞 Yü (the state Yü below) — the two characters *wu* and *yü* are interchangeable. We have already seen that in the inscriptions the state Wu in Kiangsu is called, not simply Wu but Kung-Wu or Kung-Yü.

Yen 燕 (匽, 郾).

That the latter two forms of the inscriptions are identical with the 北燕 Pei Yen of the texts is perfectly certain (see Kuo Mo-jo, Kin wen yü shï chï yü p. 7 ff.). Cf. also B 74, 75 above. This state was situated in Ta-hing-hien of Shun-t'ien-fu, Northern Hopei.

C 186. Ih. »The prince of 匽 Yen made for 姜 the Lady Kiang...». Kün 2/1: 84, Tahi 265; drawing Huaimi, Hia 12, also Shan 9: 38, our Pl. LVI.

Ying 應.

This state was situated in Lu-shan-hien of Ju-chou, West Central Honan. Very little is known about it, beyond the bare fact that it was given in fief to a son of Wu wang. In the inscriptions 187—190 its prince is called Ying kung, and they are all of an early style. In C 191 he is called Ying hou, and it is of a later style.

C 187. Ting. »The prince of Ying made...». Ill. Ishu 9, our Pl. XXIX.
C 188. Kuei. »The prince of Ying made...». K'ia 9: 4, drawing Kukien 13: 18.
C 189. Kuei. »The prince of Ying made...». Kukien 13: 19, drawing *ibid.*
C 190. Yu. »The prince of Ying made...». Kukien 16: 1, drawing *ibid.*
C 191. Kuei. »The prince (hou) of Ying made for 姬原母 the Lady Ki[1] Yüan-mu...». Po 17: 10, drawing *ibid.* Also K'ao 3: 7.

Yung 雝.

This state was situated in Siu-wu-hien of Huai-k'ing-fu, Northern Honan. It is one of the states which Tso chuan (Hi 24) enumerates as given in fief to sons of Wen wang.

C 192. Ting. »The king ordered the prince of Yung...». Mengwei, Shang 10, photo *ibid.*

Yü 虞.

This state was situated in Kie-chou (Hie-chou), Southern Shansi. It was extinguished by Tsin in 655 B. C., so C 193 must be anterior to that date.

C 193. Hu. »伯 ○ Po-X, *sï-k'ou* of Yü, made...». K'ia 14: 9, Tahi 270; Ill. Ishu 23, our Pl. LI.

The state 𨙵 X.

C 194. P'an. »The consort of the King's son 剌公 La (Lie?) kung, Lady X of the state of X (as above) made...; ... to protect and govern the state of X.». K'ia 16: 18, Tahi 274; drawing Heng 88, our Pl. LI.
C 195. Kuei. Same inscription as C 194. T'ao 2: 2, drawing *ibid.*
C 196.* Ting. Same inscription as C 194. Chengsung 3: 19.
C 197.* Hu. Same inscription as C 194. K'ia 14: 18.

All these vessels (7 Ting, 6 Kuei, 2 Hu and 1 P'an) with the same inscription were found in Hu-hien of Shensi. The script is of a comparatively late type. Kuo's surmise that this enigmatic state was a sub-fief of Ts'in is therefore plausible.

II. *Inscriptions on vessels which are not accessible in illustration.*

We shall record these much more briefly, and mostly without Chinese characters, since they are of less importance to our present study.

Ch'en.

C 198. Ting. »In the 1st month, 1st quarter, on the day ting-hai, the prince of Ch'en made...». K'i 1: 28.
C 199. Ih. »In the 1st month, 1st quarter, on the day ting-hai, the son of Ch'en-tsï made for 孟媯 the Lady Eldest sister Kuei[1]...». K'i 8: 34, Tahi 218. Kuei[1] was the clan name of the family of Ch'en.
C 200. Hien. »In the 9th month, 1st quarter, on the day ting-hai, the *kung-tsï* prince Tsï shu Yüan-fu of Ch'en made...». Kün 3/1: 9, Tahi 217.

Cheng.

C 201. Ih. »The prince of Cheng...». Kün 2/3: 8.
C 202. Li. »Prince X of Cheng...». K'i 8: 4.
C 203. Ting. »The Lady T'ung 媿 Kuei of Cheng...». K'i 1: 20.
C 204. Ih. »In the 12th month, 1st quarter, on the day yi-sï, the great *nei-shï* Shu-shang of Cheng made for 叔㜏 the Lady Third sister Yün...». Kün 2/3: 75, Tahi 215.
C 205. Sü. »Teng shu of Cheng made...». Chengsung 6: 37.
C 206. Li. »叔夏父 Shu Huo-fu of Cheng made...». Kün 2/1: 13. This may be the same person as in B 128 above.
C 207. Hien. »The *t'ai-shï*, the little one Hou-fu of Cheng made...». Kün 2/2: 19.
C 208. Ting. Yang po of Cheng made...». Chengsung 3: 1.
C 209. Ting. »Tsï-shï of Cheng made...

Ch'ï.

C 210. Kuei. »I, Chung Cha-fu, made for my august father the prince of Ch'ï and for my royal mother 姬 the Lady Ki[1] of Ch'ï...». K'i 16: 30.

Chou.

C 211. Tou. »Sheng of Chou made...». K'ia 17: 19.
C 212. Sü. »Mo of Chou made...». K'ia 15: 25.
C 213. Ting. »I-chung made for his father Ki of Chou...». Chengsung 2: 41.
C 214. Ih. »X of Chou made...». K'ia 16: 21.

Chu[1].

C 215. Chung. »In the King's 1st month, 1st quarter, on the day yi-hai, prince 華 Hua of Chu[1]...». Kün 3/2: 6, Tahi 227. Prince Hua of Chu[1] died 541 B. C.
C 216. Ting. »Prince Yü-jung of Chu[1] made...». Kün 2/2: 24, Tahi 231.
C 217. Chung. »The ruler of Chu[1] selected fine metal...». Chengsung 1: 3.
C 218. Fu. »In the 1st month, 1st quarter, the *t'ai-tsai* of Chu[1]...». K'i 17: 22, Tahi 231.

C 219. Li. »Yu-fu of Chu[1]...». K'ia 17: 8, Tahi 230.
C 220. Ting. »X of Chu[1] made...». Kün 2/1: 65.

Chu[4].

C 221. Chung. »Prince K'iu of Chu[4] made for 季姜 the Lady Youngest sister Kiang.». Chengsung 1: 4.

Ch'u.

C 222. Chung. »In the King's 1st month, 1st quarter, on the day ting-hai, prince X of Ch'u...». Chengsung 1: 4, Tahi 193.
C 223. Chung. »In the King's 5th year... King 酓章 Yin (= Hiung) Chang of Ch'u...». Kün 2/3: 77, Tahi 194. For Yin = 熊 Hiung see above. Chang was Huei wang (488—432 B. C.) of Ch'u, and the vessels is dated 463 B. C.
C 224. P'an. »... to guard the king of Ch'u...». Kün 2/2: 74, Tahi 195.
C 225. Ih. »In the King's 1st month, 1st quarter, on the day keng-wu, 嬴 the Lady Ying of Ch'u...». Chengsung, Pu chung 29.

Huang.

C 226. Kuei. »The ruler of Huang made for 季嬴 the Lady Youngest sister Ying..». Chengsung 5: 35, Tahi 201.
C 227. P'an. »In the 1st month, 1st quarter, on the day ting-hai, X of Huang... made for 仲嬴 the Lady Second sister Ying...». K'i 18: 24, Tahi 200.
C 228. P'an. »In the 1st month, 1st quarter, on the day keng-shen, X Yü-fu of Huang made...». Chengsung, Sü hia 20, Tahi 201.

Jo.

C 229. Ting. »In the 8th month of Jo, 1st quarter, on the day kuei-wei, prince 平 P'ing of Jo...». Chengsung 3: 27, Tahi 199.

Juei.

C 230. Ting. »Tsï chung... of Juei made for 叔媿 the Lady Third sister Kuei[4]...». Kün 2/2: 38.

Ki.

C 231. Kuei. »The prince of Ki made for 姜 the Lady Kiang-X...». K'i 3: 11.

Kuo.

C 232. K'ien shu Ki-fu made for the King's consort 姞 Lady Ki[2] of Kuo...». K'i 5: 30.
C 233. Kuei. »K'ien sheng of the Walled Kuo made...». K'i 3: 14.
C 234. Li. »姞 the Lady Ki[2] of Kuo made...». Chengsung 4: 3.
C 235. Ting. »姜 the Lady Kiang of Kuo made...». K'i 6: 16.
C 236. Fu. »虢叔 Kuo shu made...». K'ia 15: 6.
C 237. Fu. »Kuo shu made...». K'i 5: 20.
C 238. Sü. »Kuo shu cast...». K'i 17: 28.
C 239. Tsun. »Kuo shu made...». K'i 17: 4.
C 240. Yü. »Kuo shu made...». Chengsung 11: 2.
C 241. Ting. »Kuo shu Ta-fu made...». Chengsung 3: 1.

Lu.

C 242. Küe. »The prince of Lu made...». K'i 18: 8.
C 243. Hu. »The prince of Lu made for 叔姬 the Lady Third sister Ki[1]...». Kün 2/1: 15.

C 244. Yi. »The prince of Lu made for 姜 the Lady Kiang...». Chengsung, Pu shang 22.
C 245. Li. »The prince of Lu made for 姬 the Lady Ki^1...». Chengsung 4: 5.
C 246. Ih. »The *ta-si-t'u*... of Lu... made for 孟 姬 the Lady Eldest sister Ki^1...». K'i 8: 33, Tahi 239.

Pei.

C 247. Ting. »The prince of Pei made...». Chengsung 2: 22.
C 248. Li. »The prince of Pei made...». K'ia 17: 17.
C 249. Tsun. »The prince of Pei made...». K'i 5: 7.

Pi.

C 250. Ting. »X chung made for 媿 the Lady Kuei^4 of Pi...». Chengsung 2: 46.

P'o.

C 251. Fu. »Prince 召 Shao of P'o made...». Kün 2/3: 8.
C 252. Ting. »Prince X of P'o himself made...». Kün 2/1: 79.
C 253. Li. »The King made for 妃 the Lady Ki^3 of P'o...». Kün 2/1: 74.

Shï.

C 254. Ting. »Prince Sï of Shï made...». Chengsung 3: 15, Tahi 234.
C 255. Ting. »Tsao of Shï made...». Chengsung 2: 45.

Sie.

C 256. Ting. »Prince Ts'i of Sie made...». Kün 2/1: 32, Tahi 226.
C 257. Ih. »The prince of Sie made for 妊 the Lady Jen...». K'ia 16: 21.

Su.

C 258. Ih. »Fu-jen of Su made for... 妃 the Lady Ki^3...». K'i 8: 30.
C 259. P'an. »Fu-jen of Su made...». Chengsung 10: 25.

Sung.

C 260. Li. »Mei-fu of Sung made...». Kün 2/1: 54.

Sü.

C 261. Small bell. »In the 1st month, 1st quarter, X of Sü...». Chengsung 1: 20, Tahi 187.
C 262. Chï. »King Mou-fu of Sü...». K'i 17: 34.

Teng.

C 263. Kuei. »Prince... of Teng himself made...». K'ia 12: 11.
C 264. Kuei. »... 孟 媿 the Lady Eldest sister Kuei^4 of Teng...». Chengsung 5: 27.

T'eng.

C 265. Kuei. »Prince Su of T'eng made...». Kün 2/2: 86, Tahi 224.

Ts'ai.

C 266. Ting. »The prince of Ts'ai made...». Kün 2/1: 58.
C 267. Ih. »The prince of Ts'ai made for 姬 单 the Lady Ki^1 Tan...». Kün 2/1: 16.

C 268. Yi. »姞 the Lady Ki^2 of Ts'ai made...». K'i 5: 18, Tahi 205.
C 269. Ting. »In the 1st month, 1st quarter, on the day ting-hai, the *t'ai shï*... of Ts'ai... for 鄦 叔 姬 the Lady Third sister Ki^1 of Hü...». Chengsung, Sü shang 24, Tahi 205.

Tseng.

C 270. Fu. »... the prince of Tseng made for 叔 姬 the Lady Third sister Ki^1...». Chengsung 6: 33.
C 271. Fu. »In the 1st month, 1st quarter, on the day ting-hai, X of Tseng himself made...». Chengsung 6: 31.
C 272. Fu. »X of Tseng himself made...». Chengsung 6: 25.
C 273. Ting. »X of Tseng used...». Chengsung 3: 25.
C 274. Fu. »X of Tseng...». Chengsung 6: 24.

Ts'i.

C 275. P'an. »The prince of Ts'i made... 孟 姬 the Lady Eldest sister Ki^1...». Kün 2/2: 30.
C 276. Kuei. »The prince of Ts'i made...». K'ia 8: 8.
C 277. Kuei. »癸 姜 the Lady Kuei Kiang of Ts'i made...». Kün 2/2: 29.
C 278. Chung. »In the 1st month, 1st quarter, on the day ting-hai, the grandson of... of Ts'i...». Chengsung 1: 15, Tahi 250.
C 279. Chï. »The scribe of Ts'i made...». Chengsung, Sü chung 37.
C 280. Hu. »Liang of Ts'i made...». Chengsung 7: 31.
C 281. Cauldron. »In the year when 陳 猷 Ch'en Yu started an expedition...». K'i 6: 35, Tahi 260. Found in Kiao-chou, Shantung.
C 282. Cauldron. »Tsï-Ho-tsï... 陳 具 Ch'en Kü...». K'i 6: 35. Found together with C 281 in Kiao-chou, Shantung.
C 283. Fu. »In the King's 1st month, 1st quarter, on the day ting-hai, the young man 陳 逆 Ch'en I said: I, the descendant of 陳 起 子 Ch'en Huan-tsï... I serve the prince of Ts'i...». K'i 17: 26, Tahi 256. Cf. C 155 above.
C 284. Kuei. »In the ice month, on the day ting-hai, 逆 I, the scion of the house of Ch'en...». Kün 2/3: 40, Tahi 257.

Wu (Yü).

C 285. Fu. »X shu made for 吳 姬 the Lady Ki^1 of Wu (Yü)...». Chengsung 6: 28.
C 286. Ih. »I have myself made for the Lady Ki^1 of Wu (Yü)...». Chengsung 10: 33.

Yen.

C 287. Yi. »Prince 載 Tsai of Yen made...». Kün 2/3: 66. According to Chu shu ki nien (*ap.* So-yin to Shï ki, Yen shï kia) prince Ch'eng of Yen (449—434) had the personal name Tsai.

Ying.

C 288. Ting. »The prince of Ying made...». Kün 2/2: 35.
C 289. Ting. »The prince of Ying made...». Kün 1/3: 41.
C 290. Hu. »The prince of Ying made...». Chengsung 7: 26.
C 291. Tsun. »The prince of Ying made...». K'i 5: 7.

Yung.

C 292. Ting. »Prince Yüan of Yung made...». Chengsung 3: 12.

D. BRONZES WITH CHOU TIME CLAN NAMES.

I. *Illustrated bronzes.*

Clan Yi 弋.

D 1. Chung. »The Lady Yi 𣏌 母 Li-mu made...». Shan 1: 7, drawing *ibid.*
D 2. Kuei. »The Lady Yi Li-mu (as D 1) made...». K'i 3: 14, drawing Shan 8: 62.
D 3. Ih. »Shu Kao-fu made for *Chung Yi* the Lady Second sister Yi...». Chengsung 10: 37, drawing Shan 9: 41.

Clan Jen 妊.

D 4. Kuei. »The Lady X-Jen made...». Kün 2/1: 72; photo Mengwei, Shang 26, our Pl. XL.

Clan Ki^1 姬.

D 5. Fu. »The prince of X made for the Lady Eldest sister Ki^1...». Mengwei, Sü 11, our Pl. XLIII.
D 6. Kuei. »*Po Ki^1* the Lady Eldest sister Ki^1 made...». Chengsung, Sü shang 34; drawing Shan 8: 56.
D 7. Kuei. »辛 叔 Sin shu (»Third brother from Sin») Huang-fu made for *Chung Ki^1* the Lady Second sister Ki^1...». Kukien 28: 6, drawing *ibid.*
D 8. Ting. »辛 *Chung Ki^1* the Lady Second sister Ki^1 from Sin...». Chengsung 3: 12, drawing Kukien 2: 30. D 7 and D 8 may be suspected of being spurious, since they have 中 instead of 仲.
D 9. Fu. »The prince of X made for *Shu Ki^1* the Lady Third sister Ki^1...». Mengwei, Sü 13; the lid of this Fu now belongs to H. R. H. the Crown Prince of Sweden, our Pl. XLIII.
D 10. Fu. »The Lady Third sister Ki^1 from King (the capital) made...». Ningshou 11: 26, drawing *ibid.*
D 11. Ih. »*Ki Ki^1* the Lady Youngest sister Ki^1 made...». Po 21: 5, drawing *ibid.*, also K'ao 6: 5.
D 12. P'an. »師 奐 父 Shï Huan-fu made for *Ki Ki^1* the Lady Youngest sister Ki^1...». Chengsung 10: 27; photo Paoyün 76, our Pl. XLIV, also drawing Süyi 15: 3.
D 13. Kuei. »I have made for the Lady Ki^1...». Shan 8: 34, drawing *ibid.*
D 14. Li. »In the 12th month, 1st quarter, Li Sien-fu made for the Ladies Kiang and Ki^1...». Photo Senoku I: 9.
D 15. P'an. »Mao-shu made as a bridal gift for the Lady X-Ki^1 of the Piao family...». Sükia 15: 3 drawing *ibid.*
D 16. Ting. »Vessel of the Lady Ki^1...». Chengsung 3: 20, ill. Chengts'iu 8.
D 17. Li. »Ki^1-X-mu made...». T'ao 2: 57, drawing *ibid.*
D 18. Hu. »The Lady X-Ki^1 made...». K'ia 14: 20, drawing Heng 53.
D 19. Sü. »Chung-po made for the Lady 孌 姬 Lüan Ki^1...». K'ia 15: 19, drawing Shan 9: 11, also Kukien 29: 19.
D 20. Kuei. »Chung-po made for 辛 姬 孌 人 Sin Ki^1 Lüan jen...». Kukien 27: 23, also Sükia 12: 48.
D 21.* Hu. Same inscription as D 20. Kün 2/2: 77.
D 22. Ting. »In the 6th year, 8th month, 1st quarter, on the day ki-sï, I, the son, scribe 伯 碩 父 Po Shï-fu show my reverence for my august father 𣏌 仲 Li chung and my Royal mother 原 姬 Yüan Ki^1...». Po 2: 8, drawing *ibid.*

Clan Ki^2 姞.

D 23. Li. »The *sï-ma* Meng Sin-fu made for *Meng Ki^2* the Lady Eldest sister Ki^2...». Chengsung 4: 15; drawing Shan 3: 27, also T'ao 2: 54.
D 24. Li. »*Chung Ki^2* the Lady Second sister Ki^2 made...». Chengsung 4: 4, drawing Shan 3: 18.
D 25. Li. Same inscription as D 24. Senoku I: 7, our Pl. XXXVII.
D 26. Li. Same inscription as D 24. Photo Umehara II: 96.
D 27. Ih. »*Chung Ki^2* 義 母 the Lady Second sister Ki^2 I-mu made...». Po 20: 35, drawing *ibid.*, also K'ao 6: 6.
D 28. Kuei. »Shï Huan-fu made for *Shu Ki^2* the Lady Third sister Ki^2...». Chengsung 5: 13, photo Paoyün 68, our Pl. XXXIX, also drawing Süyi 12: 29. Shï Huan-fu is the same as in D 12 above.
D 29. Ting. »Shï Huan-fu (as in D 12, 28) made for *Ki Ki^2* the Lady Youngest sister Ki^2...». Po 3: 25, drawing *ibid.*
D 30. Urn. »In the 2nd month, 1st quarter, on the day ting-mao, 公 姞 the Lady Kung Ki^2 ordered...». Seligman Collection, Oxford, our Pl. LIII.
D 31. Kuei. »In the 2nd month, on the day mou-yin, 伯 庶 父 Po Shu-fu made for the Royal consort Lady Ki^2 and 同 姜 the Lady T'ung Kiang...». K'ao 3: 13, drawing *ibid.*
D 32. Kuei. »In the King's 5th month, on the day ping-sü, X-shu made for 豐 姞 Feng Ki^2 (or: Ki^2 of Feng?)...». K'i 16: 33, drawing Shan 8: 82.
D 33. Kuei. »Hu made for the Lady Ki^2...». Photo Umehara II: 118.
D 34. Chï. »亙 母 Ki^2 Keng-mu made...». Chengsung 9: 27; photo Shuangkien 49.

Clan Ki^3 己.

D 35. Hu. »... *Meng Ki^3* the Lady Eldest sister Ki^3...». Kukien 19: 10, drawing *ibid.*

Clan Kiang 姜.

D 36. Hu. »The consort of the King, the Lady Eldest sister Kiang made...». T'ao, Sü hia 6, drawing *ibid.*
D 37. Li. »Same inscription as D 36. Chengsung 4: 6, drawing T'ao 2: 56.
D 37 a. Ting. »The Lady Eldest sister Kiang gave...». Photo Shïerkia 7: 8.
D 38. Li. »Po Kia-fu made for *Meng Kiang* the Lady Eldest sister Kiang...». T'ao 2: 55, our Pl. L.
D 39.* Kuei. »Po... sister Kiang (= 38)...». Chengsung, Sü shang 39.
D 40.* Kuei. »Po... sister Kiang (= 38)...». Chengsung 5: 24.
D 41. Fu. »In the 1st month, 1st quarter, on the day ting-hai, X made for the Lady Eldest sister Kiang...». Kukien 29: 5, drawing *ibid.*
D 42. Kuei. »Shu X-fu made for the Lady Eldest sister Kiang...». Po 17: 18, drawing *ibid.*
D 43. Tou. »郉 比 父 Pi-fu from Shen made for the Lady Eldest sister Kiang...». Shan 9: 17, drawing *ibid.*, our Pl. LVI. 郉 Shen is very likely the state 申 Shen of the classics. This was extinguished by Ch'u in 688 B. C. In the inscription of this late vessel it is probably only the Ch'u district Shen which is referred to.
D 44. Kuei. »Ki Yung-fu made for the Lady Eldest sister Kiang...». Shan 8: 48, drawing *ibid.*
D 45. Kuei. »The grandson of the grandson of Shï Huan-fu, Shu T'o-fu, made for the Lady Eldest sister Kiang...». K'ia 8: 15, drawing Huaimi, Hia 22.
D 46. Kuei. »X-Ki-fu made for *Chung Kiang* the Lady Second sister Kiang...». Kukien 27: 25, drawing *ibid.*

D 47. Hu. »Kü shu made for the Lady Second sister Kiang. . .». Kün 2/2: 54, ill. Chengts'iu 30.
D 48. Kuei. ». . . Chung Kü-fu made for the Lady Second sister Kiang . . . Po 16: 29, 31, 33 (3 vessels): drawing *ibid.*
D 49. Hu. »Po Pang-fu made for *Shu Kiang* the Lady Third sister Kiang. . .». Shan 4: 48, drawings *ibid.*, our Pl. LI.
D 49 a. Ting. »Ta-X made for the Lady Third sister Kiang. . .». Photo Shïerkia 11: 21.
D 50. Kuei. »In the King's 4th year, 8th month, 1st quarter, on the day ting-hai, San(?)-ki made as a bridal present for the Royal mother Lady Third sister Kiang. . .». Po 16: 24, drawing *ibid.*, also K'ao 3: 3.
D 51. Kuei. »Po-X . . . made for *Ki Kiang* the Lady Youngest sister Kiang. . .». Po 21: 29, also K'ao 6: 9.
D 52. Ih. »X po made for the Lady Youngest sister Kiang. . .». Kukien 32: 4, drawing *ibid.*
D 53. Li. »Po Shang-fu made for the Lady Kiang. . .». Chengsung 4: 6, drawing Shan 3: 22.
D 54. Kuei. »Po Po-fu made for *Chou Kiang* the Lady Kiang of Chou. . .». Kün 2/2: 28, drawing Po 16: 39, also K'ao 3: 19.
D 55. Li. »The Lady 同 T'ung Kiang. . .». K'ia 17: 14, drawing T'ao 2: 58.
D 56. Li. »The Lady 京 King Kiang. . .». Po 19: 18, drawing *ibid.*
D 57. Ih. »Shu Hou-fu made for the Lady Kiang. . .». Chengsung 10: 33, drawing Shan 9: 36.
D 58. Sü. »Ch'ï made for the Lady Kiang X. . .». K'i 5: 32, drawing Shïliu 2: 9.
D 59. Ting. »Mu-fu made for the Lady Kiang X-mu. . .». Chengsung, Pu shang 9, drawing Shan 2: 55.
D 60. Tou. »The Lady Kiang 林 母 Lin-mu made. . .». Sükia 13: 9, drawing *ibid.*

Clan Kuei¹ 媯.

D 61. Ting. »La made the precious vessel . . . the Lady Kuei¹ of X. . .». Chengsung, Pu shang 10, photo Senoku I: 3.

Clan Kuei⁴ 媿.

D 62. Kuei. »Ts'uei (?) made for the Royal mother the Lady Kuei⁴. . .». Chengsung 5: 22, drawing Shan 8: 63.
D 63. P'an. Same inscription as D 62. Chengsung 10: 26, drawing Shan 9: 53.
D 64. Ih. Same inscription as D 62. Shan 9: 40, drawing *ibid.*
D 65.* Ho. Same inscription as D 62. Chengsung, Süchung 26.

Clan Sï 姒 (始).

D 66. Li. »會 始 the Lady Sï of Kuei made. . .». Chengsung, Pu shang 15, drawing Shan 3: 16. 會 Kuei may be equal to the city 鄶 Kuei, which prior to the Ch'un ts'iu era was an independent state.
D 67. Ting. »Chung Shï-fu made for *Ki Sï* the Lady Youngest sister Sï. . .». K'i 2: 6, photo Mengwei, Shang 15.
D 68. Ho. »Ki Liang-fu made for the Lady X Sï. . .». K'ia 14: 23, drawing Heng 93, also Kukien 31: 35.
D 69. Kuei. »Yi shu made for the Lady Sï. . .». Kukien 13: 26, drawing *ibid.*

Clan Yao 姚.

D 69 a. Ting. »X shu Fan made for the Lady Yao of X. . .». Photo Shïerkia 5: 6.

Clan Ying 嬴.

D 70. Ting. »Lie ki made for the Lady Ying. . .». Wuying 24, photo *ibid.*
D 71. Yu. »*Ying Ki* the Lady Youngest sister Ying made. . .». Picture postcard of the Palace Museum, Peking.

Clan Yün 娟 (妘).

D 72. Fu. »Ki X-fu made for 宗 *Tsung Yün* the principal consort, Lady Yün . . .». K'i 5: 22; photo Shuangkien 11, also drawing Heng 91, P'anku, Shang 46, T'ao, Sü shang 42 and Kukien 29: 1.

II. *Not illustrated bronzes.*

Clan Yi.

D 73. Kuei. »The Lady Third sister Yi. . .». K'i 3: 30

Clan Jen.

D 74. Hien. »The Lady Kung Jen. . .». K'i 8: 6.

Clan Ki¹.

D 75. Li. ». . . the Lady Eldest sister Ki¹. . .». Chengsung 4: 11.
D 76. Ting. »In the 9th year, 1st quarter, on the day ting-hai . . . the Lady Eldest sister Ki¹. . .». Kün 2/3: 27.
D 77. Yi. »In the 1st month, on the day ki-hai . . . the Lady Eldest sister Ki¹. . .». Chengsung 4: 46.
D 78. Fu. ». . . the Lady Second sister Ki¹. . .». K'i 17: 34.
D 79. Sü. ». . . the Lady Second sister Ki¹. . .». K'ia 15: 24.
D 80. P'an. ». . . the Lady Second sister Ki¹ K'o-mu. . .». Kün 2/2: 74.
D 81. Ih. ». . . the Lady Second sister Ki¹. . .». K'ia 16: 20.
D 82. Li. ». . . the Lady Third sister Ki¹. . .». Chengsung, Sü shang 26.
D 83. Ting. ». . . the Lady Third sister Ki¹. . .». Kün 2/1: 20.
D 84. Ting. ». . . the Lady Third sister Ki¹. . .». Kün 2/2: 23.
D 85. Li. ». . . the Lady Third sister Ki¹. . .». K'ia 17: 15.
D 86. Kuei. ». . . the Lady Youngest sister Ki¹. . .». Chengsung, Pu shang 25.
D 87. Hu. ». . . the Lady Nei Ki¹. . .». K'ia 14: 16 (possibly we have to read Juei Ki, in which case the inscription should belong to cat. C above).
D 88. Li. »The Lady K'i Ki¹. . .». Chengsung, Sü shang 25.
D 89. Li. »The Lady Ki¹ Yin-mu. . .». Kün 2/1: 53.
D 90. Li. »The Lady X-Ki¹. . .». Chengsung 4: 6.
D 91. Li. »The Lady Ki¹. . .». K'ia 17: 17.
D 92. Yi. »Made for the Lady Ki¹. . .». Chengsung 4: 40.
D 93. »Kuei. »X Ki¹. . .». Kün 1/3: 44.
D 94. Kuei. ». . . made for the Lady Ki¹. . .». Chengsung 5: 7.
D 95. Kuei. ». . . made for the Lady X Ki¹. . .». Chengsung 5: 11.
D 96. Kuei. ». . . made for the Lady X Ki¹. . .». Chengsung 5: 34.
D 97. Kuei. ». . . made for the Lady Ki¹ of Nie. . .». Chengsung 5: 16.
D 98. Kuei. »X Ki¹ . . . made». K'ia 9: 3.
D 99. Fu. ». . . the Lady Ki¹. . .». Chengsung 6: 30.
D 100. Sü. ». . . the Lady Sü Ki¹. . .». Chengsung 6: 38.
D 101. Kuei. ». . . the Royal Lady Ki¹. . .». K'i 16: 26.

D 102. Tsun, lid. »In the 1st month, on the auspicious day yi-ch'ou . . . the Lady P'ing Ki¹. . .». K'i 8: 11.
D 103. Lei. »The Lady Nü Ki¹. . .». Kün 2/2: 8.
D 104. Hu. ». . . made for the Lady Ki¹. . .». K'ia 14: 17.
D 105. Hu. »The Lady Ki¹ of P'eng. . .». K'i 18: 12.
D 106. P'an. ». . . made for the Lady X Ki¹. . .». Kün 2/2: 65.
D 107. Ih. ». . . the Lady Shï Ki¹. . .». Chengsung 10: 38.
D 108. Li. ». . . made for the Lady Ki¹ of Tsing and the Lady Youngest sister Kiang.». Kün 2/1: 54.
D 109. Li. »The Lady X Ki¹ made for the Lady Third sister Kuei⁴. . .». Kün 2/1: 61.

Clan Ki².

D 110. Kuei. »The Lady Ki² made. . .». Kün 2/2: 64.
D 111. Chï. »Made for the Lady Ki². . .». Chengsung 9: 24.
D 112. Sü. »The Lady Third sister Ki². . .». K'ia 15: 25.
D 113. Ting. »The Lady Pa Ki². . .». K'i 1: 19.
D 114. Kuei. ». . . the Lady Ki². . .». K'ia 11: 24.
D 115. Kuei. ». . . the Lady Ki² of Lu. . .». Chengsung 5: 10.
D 116. Ting. ». . . the Lady Ki² of Man. . .». Chengsung 2: 37.

Clan Ki³.

D 117. Sü. ». . . the Lady Ki³. . .». Chengsung 6: 40.
D 118. P'an. »In the King's 1st month, 1st quarter, on the day ting-hai, . . . the Lady Youngest sister Ki³. . .». Chengsung 10: 30.
D 119. Ih. ». . . the Lady Ki³. . .». Chengsung 10: 34.
D 120. Hu. »In the 26th year, 10th month, 1st quarter, on the day ki-mao, Kün-sheng of P'o (?) . . . eldest child, the Lady Eldest sister Ki³. . .». Chengsung 7: 32.
D 121. Kuei. »The Lady Third sister Ki³. . .». Kün 2/1: 52.

Clan Kiang.

D 122. Hien. »The Lady Eldest sister Kiang. . .». Kün 2/1: 62.
D 123. Ih. »The Royal consort, the Lady Eldest sister Kiang of Ki. . .». K'ia 16: 23.
D 124. Sü. ». . . the Lady Third sister Kiang. . .». K'i 17: 31.
D 125. Hu. ». . . the Lady Third sister Kiang. . .». Chengsung, Pu shang 36.
D 126. Ting. »The Lady X Kiang. . .». Chengsung 2: 27.
D 127. Ih. ». . . the Lady X Kiang. . .». K'i 8: 31.
D 128. Yu. ». . . gave cowries to the Lady Kiang. . .». Chengsung 8: 28.

Clan Kuei⁴.

D 129. Ting. ». . . the Lady X Kuei⁴. . .». K'i 16: 4.

Clan Sï.

D 130. Kuei. ». . . the Lady Sin Sï. . .». K'ia 12: 21.

Clan Ts'ao.

D 131. Kuei. ». . . the Lady Ts'ao of Feng (or: Feng-Ts'ao?). . .». Kün 2/1: 73.
D 132. Ting . . . the Lady Ts'ao Pi. . .». Chengsung 2: 43.

Clan Ying.

D 133. P'an. »In the 1st month, 1st quarter, on the day keng-wu, . . . the Royal mother, Lady Ying. . .». Chengsung 10: 29.

Clan Yün.

D 134. Kuei. »Han Huang-fu made for the Lady Yün of Chou. . .». K'i 3: 30. Kuo Mo-jo (Tahi 141) repeats some extremely fanciful speculations of earlier writers, a. o. Wang Kuo-wei, about these names.
D 135. Ih. »Han Huang-fu made for the Lady Yün of Chou. . .». K'i 8: 31.
D 136. Ho. ». . . the Lady Yün. . .». Kün 2/2: 75.
D 137. Li. ». . . the Lady Third sister Yün. . .». Kün 2/2: 9.

E. BRONZES WITH NAMES OF THE CHOU TIME X-FU TYPE.

I. *Illustrated bronzes.*

E 1. Ting. »埶 父 Chï-fu made. . .». Sükia 1: 24, drawing *ibid.*
E 2. Ho. »仲 𠂤 (師) 父 Chung Shï-fu. . .». Kukien 31: 39, drawing *ibid.*
E 3. Yu. »Chung Shï-fu (as E 2). . .». Kukien 16: 5, drawing *ibid.*
E 4. Kuei. »Chung Shï-fu (as E 2). . .». Heng 38, drawing *ibid.*
E 5. Kuei. »Chung Shï-fu (as E 2). . .». Kukien 28: 10, drawing *ibid.*; photo Tch'ou XIII.
E 6. Sü. »Chung Shï-fu (as E 2). . .». T'ao 2: 50, drawing *ibid.*
E 7. Ting. »仲 義 父 Chung I-fu. . .». Chengsung 3: 9, drawing Shan 2: 64.
E 8. Ting. »Chung I-fu (as E 7). . .». T'ao 1: 30, drawing *ibid.*
E 9. Kuei. »仲 鄭 父 Chung Cheng-fu from X. . .». Po 17: 20, drawing *ibid.*
E 10. An. »仲 阪 父 Chung Fan-fu. . .». Shan 9: 58, drawing *ibid.*
E 11. Kuei, lid. »仲 五 父 Chung Wu-fu. . .». K'ia 8: 5, drawing Lianglei 6: 40, also Ch'angan 1: 22.
E 12. Ting. »仲 宦 父 Chung Huan-fu. . .». T'ao, Sü shang 18, drawing *ibid.*
E 13. Kuei, lid. »仲 酉 父 Chung Yu-fu. . .». Po 17: 26, drawing *ibid.*
E 14. Kuei. »In the King's 1st month, 仲 惠 父 Chung Huei-fu. . .». Chengsung 5: 28, drawing Kukien 28: 8.
E 15. Hu. »In the 6th month, 1st quarter, on the day ting-hai, . . . 仲 ○ 父 Chung X-fu. . .». K'ao 4: 53, drawing *ibid.*
E 16. Li. »仲 ○ 父 Chung X-fu. . .». Po 19: 13, drawing *ibid.*
E 17. Li. »仲 ○ 父 Chung X-fu. . .». Mengwei, Sü 7, photo *ibid.*
E 18. Kuei. »仲 ○ 父 Chung X-fu. . .». Kün 1/3: 55, drawing Lianglei 6: 42, our Pl. XXXI.
E 19. Kuei, lid. »仲 ○ 父 Chung X-fu. . .». K'ao 3: 21, drawing *ibid.*
E 20. Ih. »甫 人 父 Fu Jen-fu. . .». Kün 2/1: 55, drawing Huaimi, Hia 11.
E 21. Kuei. »黃 仲 父 Huang Chung-fu. . .». Shan 8: 47, drawing *ibid.*
E 22. Kia. »In the 1st year, 1st month, 1st quarter, on the day ting-hai, 嘉 仲 父 Kia Chung-fu. . .». Senoku II: 88, photo *ibid.*
E 23. Kuei. »The son of prince X, 癸 父 甲 Kuei-fu Kia. . .». Süyi 12: 37, drawing *ibid.*
E 24. Tsun. »Wei made for 季 衛 父 Ki Wei-fu. . .». Chengsung 7: 14, drawing Shan 4: 85.
E 25. Yu. Same inscription as E 24. Umehara I: 78, photo *ibid.*
E 26. Sü. »遣 叔 吉 父 K'ien shu Ki-fu. . .». Shan 9: 15, drawing *ibid.*
E 27. Kuei. »孟 鄭 父 Meng Cheng-fu. . .». Kün 2/2: 29; photo Paoyün 70, also drawing Süyi 12: 31.
E 28. Kuei. »孟 ○ 父 Meng X-fu. . .». Chengsung 5: 12, drawing Shan 8: 59.

E 29. Hu. »孟 ○ 父 Meng X-fu...». Chengsung 7: 26, drawing Kukien 19: 16.
E 30. Ting. »孟 ○ 父 Meng X-fu...». Kün 1/3: 40, drawing Ch'angan 1: 10.
E 31. Sü, lid. »伯 庶 父 Po Shu-fu...». T'ao, Sü shang 45, drawing *ibid.*, photo Mengwei, Shang 18.
E 32. Hu. »Po Shu-fu (as E 31)...». Chengsung, Pu shang 37, drawing Sükia 8: 40; picture postcard of the Peking Palace Museum, our Pl. XXXV.
E 33. Fu. »伯 其 父 麐 Po K'i-fu Lin...». K'i 17: 9, photo Mengwei, Sü 14.
E 34. Kuei. »伯 田 父 Po T'ien-fu...». K'i 3: 16, drawing T'ao 2: 1.
E 35. Ih. »伯 正 父 Po Cheng-fu...». Kün 2/2: 33, drawing Ch'angan 1: 29.
E 36. Ho. »伯 衛 父 Po Wei-fu...». Shan 9: 32, drawing *ibid.*
E 37. Kuei. »伯 中 父 Po Chung-fu...». Sükia 12: 42, drawing *ibid.*
E 38. Kuei. »In the 5th month, on the day jen-yin, Po Chung-fu (as E 37)...». T'ao, Sü shang 37, drawing *ibid.* (37 and 38 are very similar but not quite identical).
E 39. Ting. »... 伯 員 父 Po Yüan-fu...». Sükia 1: 38, drawing *ibid.*
E 40. Kuei. »伯 ○ 父 Po X-fu...». Our Pl. XII, Oeder collection.
E 41. Ting. »伯 ○ 父 Po X-fu...». Chengsung, Pu shang 10, drawing Shan 3: 60.
E 42. Ting. »伯 筍 父 Po Sün-fu...». Chengsung 3: 6, drawing Kukien 2: 25, our Pl. XXXV.
E 43. Kuei. »伯 ○ 父 Po X-fu...». K'ia 12: 6, drawing Shan 8: 65.
E 44. Fu. »伯 ○ 父 Po X-fu...». K'ia 15: 16, drawing Sükia 13: 3.
E 45. Ting. »伯 ○ 父 Po X-fu...». Ishu 10: 62, ill. *ibid.*
E 46. Tsun. »On the day yi-mao, Po X-fu...». Kukien 9: 17, drawing *ibid.*
E 47. Fu. »伯 ○ 魚 父 Po-x Yü-fu...». Chengsung 6: 25, drawing Shan 9: 3.
E 48. Kuei. »召 父 Shao-fu...». Po 8: 18, drawing *ibid.*
E 49. Kuei. »事 父 Shï-fu...». Chengsung, Sü shang 31, photo Sungchai 9.
E 50. Hu. »Shï-fu (as E 49)...». Sükia 8: 39, drawing *ibid.*
E 51. Sü. »師 奐 父 Shï Huan-fu...». K'ao 3: 36, drawing *ibid.*
E 52. Ting. »師 器 父 Shï K'i-fu...». K'i 16: 8, drawing Ch'angan 1: 7.
E 53. Kuei, lid. »史 ○ 父 Shï X-fu...». Po 17: 25, drawing *ibid.*
E 54. Hien. »In the 6th month, 1st quarter, Shï X-fu (as E 53)...». K'ao 2: 17.
E 55. Hien. »叔 碩 父 Shu Shï-fu...». K'ao 17: 5, drawing T'ao, Sü hia 3, our Pl. XLIX.
E 56. Tou. »叔 賓 父 Shu Pin-fu...». Shan 9: 19, drawing *ibid.*, our Pl. L.
E 57. Ih. »叔 男 父 Shu Nan-fu...». Heng 90, drawing *ibid.*
E 58. P'an. »叔 五 父 Shu Wu-fu...». Sükia 15: 4, drawing *ibid.*
E 59. Sü. »叔 良 父 Shu Liang-fu...». K'ao 3: 32, drawing *ibid.*
E 60. Kuei. »叔 桒 父 Shu Sao-fu...». K'i 16: 23, drawing Sükia 6: 25.
E 61. Kuei. »叔 ○ 父 Shu X-fu...». Süyi 6: 34, drawing *ibid.*
E 62. Kuei. »叔 ○ 父 Shu X-fu, younger brother of 牧 師 父 Mu Shï-fu...». Chengsung 5: 37, drawing Shan 8: 76, photo of lid Shuangkien 15.
E 63. Yu. »衛 父 Wei-fu...». K'ia 19: 18, drawing Heng 66, also P'anku, Shang 31, Kukien 15: 27.
E 64. Hien. »午 字 父 Wu Tsï-fu...». Shan 3: 38, drawing *ibid.*
E 65. Tsun. »員 父 Yüan-fu...». K'i 5: 6, photo Mengwei, Sü 24.
E 66. Kuei. »○ 父 X-fu...». Sükia 7: 1, drawing *ibid.*
E 67. Tsun. »... ○ 父 X-fu...». Chengsung 7: 17, drawing Kukien 8: 39.
E 68. Yu. »○ 父 X-fu...». Chengsung, Pu chung 7, drawing Sükia 8: 7, picture postcard of the Peking Palace Museum.
E 69. Hu. »○ 父 X-fu...». Sükia 8: 40, drawing *ibid.*
E 70. Li. »○ 孜 父 X Tsï-fu...». K'ao 2: 7, drawing *ibid.*

E 71. Ting. »... ○ 宂 父 X Jung-fu...». Kün 2/2: 38, photo Shuangyü 7, also drawing Shan 2: 65.
E 72. Kuei. »○ 白 父 X Po-fu...». T'ao 2: 6, drawing *ibid.*
E 73. Ting. »○ 駒 父 X Kü-fu...». Po 3: 28, drawing *ibid.*
E 74. Ting. »○ ○ 父 X X-fu...». Sükia 1: 23, drawing *ibid.*
E 75. Kuei, lid. »叔 友 父 Shu Yu-fu...». Kün 2/1: 52, photo Shïerkia 5: 20.
E 76. Ting. »鮮 父 Sien-fu...». Chengsung 2: 35, photo Shïerkia 6: 3.
E 77. Li. »季 右 父 Ki Yu-fu...». Chengsung, Pu shang 16, photo Shïerkia 6: 5.

II. *Not illustrated bronzes.*

Since these are only of indirect (statistical) interest to our present study, I record them very briefly and without Chinese characters.

E 78. Kuei: An-fu, Kün 1/3: 46; E 79. Kuei: Chung Chuei-fu, Chengsung 4: 42; E 80. Ting: Chung I-fu, Chengsung 2: 32; E 81. Ling: Chung I-fu, Chengsung 11: 6; E 82. Sü: Chung I-fu, Chengsung 6: 35; E 83. Ting: Chung Yu-fu, Chengsung 2: 42; E 84. Kuei: Chung Sin-fu, Chengsung 5: 40; E 85. Kuei: Chung Yin-fu, Chengsung 5: 27; E 86. Ting: Chung Yin-fu, Kün 2/2: 1; E 87. Ting: Chung Shï-fu, Kün 1/3: 4; E 88. Yi: Chung Ming-fu, K'i 17: 11; E 89. Hien: Chung Kung-fu, Chengsung 4: 20; E 90. Kuei: Chung X-fu, Chengsung, Pu shang 24; E 91. Li: Chung X-fu, Chengsung 4: 11; E 92. Ting: Fu po X-fu, Chengsung 3: 7; E 93. Kuei: »In the 1st month, 1st quarter, on the day keng-yin ... Hia-fu, Kün 2/3: 70; E 94. Kuei: Ki X-fu, Chengsung, 5: 7; E 95. Kuei: Ki X-fu, Chengsung 5: 24; E 96. Kuei: Kü-fu, Kün 1/2: 77; E 97. Ting: Kin-fu, K'i 16: 18; E 98. Kuei: »In the King's 1st month, 4th quarter, on the day yi-mao, Kuan X-fu...». Chengsung 5: 35; E 99. Sü: Li shu Hing-fu, K'i 17: 29; E 100. Ting: Lü-fu, Chengsung 2: 34; E 101. Hu: Meng Shang-fu, K'i 6: 28; E 102. Ho: Po Küe-fu, K'i 18: 23; E 103. P'an: Po Hou-fu, Kün 2/2: 52; E 104. Yü: Po Kung-fu, Kün 2/2: 13; E 105. Ting: »In the 5th month, 2nd quarter, on the day keng-wu, Po Su-fu...». Kün 3/1: 36; E 106. Sü: Po Sün-fu, K'ia 15: 17; E 107. Hien: Po Sün-fu, K'ia 17: 5; E 108. Ih: Po Shu-fu, Kün 2/1: 30; E 109. Fu: Po Yung-fu, Chengsung 6: 30; E 110. Ting: Po Hiao-fu, Chengsung 3: 6; E 111. Kuei: Po Kia-fu, Chengsung 5: 43; E 112. Ting: Po Cheng-fu, Kün 2/1: 58; E 113. Hu: Po Lu-fu, Chengsung, Sü chung 12; E 114. Kuei: Po Yin-fu, Kün 1/3: 55; E 115. Kuei: Po X-fu, K'ia 8: 6; E 116. Kuei: Po X-fu, Chengsung 5: 9; E 117. Li: Po X-fu, Kün 2/2: 18; E 118. Ting: Shao-fu, K'i 16: 3; E 119. Kuei: Shu Hou-fu, K'ia 11: 14; E 120. Kuei: Shu P'i-fu, Chengsung 5: 39; E 121. Kuei. »In the 1st month, 1st quarter, Shu P'i-fu», K'i 3: 26; E 122. Ting: Shu Shï-fu, Kün 2/2: 79; E 123. Ting: Shu Shï-fu; E 123 A. Kuei: Shu X-fu, Chengsung 5: 9; E 124. Kuei: Shu X-fu, Kün 1/3: 55; E 125. Kuei: Shu P'eng-fu, K'ia 8: 10; E 126. Kuei: Shu Küe-fu, K'i 3: 16; E 127. Kuei: Shu Ts'ang-fu, Kün 1/3: 63; E 128. Sü: Shu Lo-fu, Chengsung, Sü chung 3; E 129. Sü: Shu Pin-fu, Kün 2/1: 77; E 130. Ting: Shu P'ang-fu, Kün 2/2: 2; E 131. Ting: Shu Yü-fu, Kün 2/1: 48; E 132. Hu: Shu ki Liang-fu, K'i 18: 13; E 133. Sü: Shï-chung Tsou-fu, Chengsung 6: 40; E 134. Ting: Si po Yü-fu, K'i 1: 26; E 135. Hien: Tsï Pang-fu, K'ia 17: 6; E 136. Kuei: Yüan-fu, Kün 1/3: 55; E 137. Hien: X-fu, Kün 2/2: 10; E 138. Kuei: X-fu, Chengsung 5: 5; E 139. P'an: X-fu, K'i 8: 8; E 140. P'an: X-fu, K'ia, 16: 3; E 141. Ting: X-fu, Kün 1/3: 41; E 142. Ting: X-fu, Chengsung 2: 34; E 143. Ting: X-fu, Kün 2/1: 58; E 144. Ting: X-fu, Chengsung 3: 17; E 145. Tsun: X-fu, Chengsung 7: 14; E 146. Kuei: X Lin-fu, Kün 2/3: 10 (Kuo, Tahi 263 has an extravagant speculation about this); E 147. Ting: X X-fu, K'ia 6: 11.

THE STYLE CRITERIA.

So far we have worked exclusively with the inscriptions, without availing ourselves in the slightest degree of the evidence afforded by the vessels themselves, their type and decoration, for determining their chronology. On the strength of the inscriptions alone we have sorted 817 vessels, illustrations of which have been available to us, into various groups: One Yin group, comprising 337 vessels; one Royal Chou group from the first half of Western Chou (1122—947) comprising 64 vessels; one Royal Chou group from the second half of Western Chou (946—771) comprising 56 vessels; one Royal Chou group from Western Chou generally (1122—771 — no subdivision being feasible here) comprising 26 vessels; one Feudal Court group from Chou time generally (1122—256), the great majority however being decidedly (see p. 24) of Eastern Chou time (770—256), comprising 185 vessels; one Chou Clan Name group from Chou time generally (1122—256), but here again very largely from Eastern Chou time (770—256), comprising 72 vessels; one X-fu Name group, dating between 1122 and circa 400 B. C., comprising 77 vessels. We shall see below that some reductions have to be made owing to bad illustrations or indifferent vessels; yet we shall have, after all, 734 reliable cases, 303 of Yin time and 431 of Chou time.

This material is sufficiently comprehensive to allow of fairly definite conclusions being drawn from it. It is obvious that it forms but a part of the material actually existing in various collections in the Far East, Europe and America. But the great majority of still extant vessels with really important inscriptions, such as can afford a valuable clue to the dating, have undoubtedly been incorporated in one or other of the repertories drawn upon above. Accordingly, the conclusions we draw from our material composed of 734 good illustrated vessels are not likely to be fundamentally refuted by the subsequent examination of any vessels that may not have been published as yet. Certainly the bulk of the pertinent material has been taken into account here, considering the wide scope of the repertories listed on p. 17 above.

We now revert to the statement we made on p. 15 above: if we find that to the chronological categories just established by means of the inscriptions there correspond fairly clear and exact typological categories, so that the distinctions in time which the inscriptions indicate convey also distinctions in type and decoration, then we shall have decisive proof of the general authenticity of both the inscriptions and the vessels, and we can confidently continue to build further on the basis of materials thus collected and sorted in chronological categories, and elaborate a real chronology of the Chinese Bronze Age. Fortunately there does exist a correspondence of this kind between inscriptions and vessels. We find a long series of fundamentally important elements in type and decoration (cf. p. 116—120 below), which appear for the first time in the vessels with Chou time inscriptions and are never to be found in those with Yin time inscriptions. We

can even go a step further: the appearance of the new Chou style which was unknown in Yin time, can be dated with far greater precision; it was still unknown in the first half of Western Chou (1122—947), cat. B I, when there still existed universally an art of almost exactly the old Yin type, with but few modifications; the new art appears suddenly in the reign of the 6th king of the Chou, and it is entirely predominant during the second half of the Western Chou (946—771), cat. B II, having completely swept away the old art. This state of affairs cannot have been due to chance, nor to any systematic effort on the part of forgers who have worked for generations, isolated from each other and without the possibility of observing the laws of art history, which have never been explored before now. We have here the most incontrovertible evidence in favour of the authenticity of the best stock of Chinese archaic bronzes, and we shall now proceed to study them systematically in the light of the above-mentioned chronological grouping, which has been made possible by a study of their inscriptions.

Before so doing we should point out that we cannot make here more than a preliminary study. We seize upon a number of features which seem to us to furnish the safest and clearest criteria, easily observable features of form and decoration. A great number of other criteria have to be left out of account. Such are, in particular, some of those employed by students of art history: more or less clumsy and primitive types, as against more elegant and refined; strictness or severity, as against more baroque features; various shades of patina, and such-like.

If we do not work with criteria of this kind in the present article, it is not because we underestimate their value and importance. It is, in the first place, because they are rather the criteria of the art student, whereas we are working along more archæological lines; in the second place, because in nine cases out of ten we have to work not with the vessels themselves, which would enable us to study colour, patina, the finer details of the handicraft, but with illustrations only, and in a majority of cases not even with photographs but with more or less clumsy drawings. We are therefore forced to limit our investigations to more elementary, matter-of-fact and palpable criteria, such as certain types of elements: straight or curved legs, scale pattern, cicada pattern, rings standing on the lids, and so on, and to leave the study of the more subtle æsthetic distinctions to the professional art connoisseur.

These considerations lead us on to meet a general objection to our mode of study, which might seem very natural and very serious. It might be argued that, when it is a question of art and archæology, it is not permissible to draw any conclusions at all from materials to which we have access only through illustrations, photographs or drawings; that as long as we cannot handle the vessels themselves, observe their quality and finer details and thus form an opinion of their intrinsic value, their authenticity, their finer chronological criteria,

we should not pronounce any views about them at all. How can we know that an object which we find as a drawing in a Chinese catalogue is not a mere Sung or Ming copy passing for an archaic bronze? The clumsy drawings, which conceal all the subtle niceties, and which often misrepresent the vessels in one aspect or another, according to the draughtsman's subjective interpretation of them, are bound to be extremely risky and imperfect recorders of archæological facts.

This objection might seem to be fatal, but it can be met by the following observations:

a) For deciding the question of authenticity we do *not* build on an examination of the drawings but on two criteria already discussed above: on the one hand the careful scrutiny and selection made by Chinese experts, who have studied the vessels themselves, a selection which we have made the basis of our collecting of materials (see p. 15 above); on the other hand and above all, the conformity between style distinctions and epigraphic period distinctions mentioned above (p. 86) and to be studied in detail below, a degree of conformity that would be inconceivable if it were not merely in isolated, exceptional cases that vessels proved to be modern forgeries.

b) In making use of the drawings of vessels in the Chinese repertories we do not extract more from the materials than is allowable. Since they are merely drawings, not photographs, we never try to analyse the subtle niceties of the vessels but limit ourselves, as we remarked just now (p. 87), to such palpable criteria as even a clumsy drawing cannot misrepresent.

c) During our prolonged study of the Chinese repertories side by side with the modern photographic albums we have had the opportunity of examining a great many vessels reproduced both in Chinese drawings and in photographs. This has been very instructive. Such a parallel study affords a surprising amount of experience and insight into what the Chinese draughtsmen really intend their drawings to represent. To the experienced eye, therefore, a drawing in a Chinese album says far more than to the uninitiated who casually glances at the album. In many cases the patient student can tell almost unfailingly what elements are really intended, and checking by means of a parallel photograph will nearly always confirm the correctness of his interpretation. The risk involved in taking the Chinese drawings as a basis for study is therefore by no means so great as it might appear to be, so long as the student really grasps the significance of the »laws of Chinese drawings».

d) Nevertheless, we have taken some necessary extra precautions. In the detailed analysis we give below of all the inscribed vessels which form our material the reader will often find cases in which we express some doubt: either the drawn vessel itself seems to us to be suspect (in spite of the fact that it has been admitted into a first-class repertory), in which case we have frankly ventilated our misgivings; or the drawing has seemed to us to be so poor that we

have not ventured upon an interpretation of what it should represent, in which case we have invariably mentioned the fact.

e) Finally — and most important of all: we never, on principle, base any conclusions on an isolated drawing, since there will always be a risk of its representing a forged vessel. Throughout the following analysis we work with series of vessels; we establish general laws, based on a large number of examples. If we establish the fact that a characteristic of the Middle Chou style is a band of scales placed lengthwise, we adduce a series of 79 vessels, all with demonstrable Chou time inscriptions and having scales of that kind; even if it should prove that one or two of these vessels (in spite of having passed the scrutiny of the best Chinese experts) are in fact spurious, that cannot in any way prejudice our conclusion that such scales form a criterion of Middle Chou style. This statistical consideration is so important that we give complete lists of all our materials, in which every vessel is analysed as to its criteria, the latter being moreover indicated by special figures, which facilitates the reader's controlling at a glance the frequency of any given criterion.

The considerations expressed under a—e here should suffice, we think, to meet the objection that the materials of the drawn Chinese repertories are not suitable for archæological conclusions.

In the article Exhibition of Early Chinese Bronzes (BMFEA 6) the style periods prior to Han that were provisionally established were four in number: Yin, Yin-Chou, Middle Chou and Huai. We can retain this classification, though largely attaching to these periods a different purport. Some of the period criteria established in that article are quite correct, and we are glad to be able to confirm them with a long series of definitely conclusive examples. But certain other criteria have turned out to be erroneous, and some vessels there placed in the Middle Chou category, for instance, have to be transferred to Yin or Yin-Chou time. For the details of these amendments see below.

In taking over the terms Yin, Yin-Chou, Middle Chou and Huai we must clearly indicate at the outset some important facts relating to the purport of these terms in the present work.

1) The distinction Yin: Yin-Chou is due to historical rather than to stylistic considerations. In fact, by the term Yin-Chou we shall indicate the art of the first half of the Western Chou epoch (the epoch 1122—947 B. C., see p. 28 above), and the term has to be interpreted thus: »That Chou time art which was still essentially the same as that of the Yin, with but small innovations». The reason why we do not prefer a term »Early Chou» is that »Early Chou» would more readily give the impression of a really new art, in contradistinction to that of the Yin. The term Yin-Chou suggests its character of an epigonous art.

2) The term Huai should not be misunderstood. It does not mean — and in our publications in the BMFEA it has never meant — »the art of the Huai

river valley». It means »the style of art, flourishing during the later half of the Chou and during the Ts'in dynasty, which, when first located with any certainty in any definite Chinese region, was attested in the Huai valley by Mr. Karlbeck». It is a convenient name, chosen according to a common archæological practice, a conventional denomination founded upon its *first* certain geographical location. And just as the Yang-shao culture — so called because Andersson first located it in Yang-shao of Honan — flourished quite as abundantly in Kansu as in Honan, so we can testify to the existence of the Huai style not only in Anhuei but equally well in Shantung, Shansi, Shensi etc.

3) The division into four periods, Yin, Yin-Chou, Middle Chou and Huai, is a very rough and summary division. It stands to reason that quite a large series of subdivisions is feasible. We could certainly distinguish between an earlier and a later phase of the Yin style, an earlier and later phase of the Middle Chou style. But only very rarely have we pointed out such facts in the present work; we have thought it advisable first of all to establish some more general laws and to limit the scope of our actual work to the determination of some fundamental criteria governing the great principal divisions. To the detailed questions of sub-divisions we hope to revert in another paper.

In the following analysis of the four periods we shall work exclusively with such elements as are distinctive, i. e. which form criteria of one style in contradistinction to another. Many important features of the archaic bronze art we shall therefore leave entirely out of consideration, since they occur in all periods. Such are, for instance, the arched-backed dragon (see e. g. Pl. XXV: B 155), the S-shaped dragon (Pl. XXV: B 153), animal's heads on the upper part of the legs of Ting tripods (Pl. I: A 2), animal's heads on the handles (Pl. XIII; A 304), small sectional flanges (Pl. III: A 246; very rare in Huai, yet existing), diagonal pattern (Pl. XLVIII: C 66), two or three parallel horizontal raised lines on the body or round the neck of the vessel (Pl. XXIII: A 67), rings in the handles (Pl. XLI: B 89) etc. What we claim to give is therefore not an all-round and exhaustive description of all elements characteristic of the archaic Chinese bronzes, but only an investigation of such easily observable elements as can serve to determine the attribution of a vessel to one or other of the above-mentioned four periods.

THE YIN STYLE.

The criteria of the Yin style, as revealed by the vessels A (1—337) with which we are concerned in the present paper, are the following 38 elements. Since we have to repeat them scores of times in the following pages, we need a short demomination for each criterion, consisting of a word or two only, and we shall place these catchwords at the head of each paragraph here. These denominations are of course not intended to be exhaustive; they are summary terms for practical use, and a reference is necessary to the fuller account of each criterion

here given. In the following pages all references by figures to these criteria are given in *italics*, in order to avoid confusion with the numbers of the vessels in the various groups (A 1, A 2 etc.).

1. »Square Ting».

This is the type of Ting with square body occurring e. g. in Pl. I: A 1, A 2; II: A 6; XXIX: A 5, A 9.

2. »Li-ting».

The Li and the Ting are in principle two entirely different vessels: the Ting has a hemispherical body (e. g. Pl. III: A 246); the Li originates from three pointed-bottomed vessels combined into one (Pl. V: A 196), and therefore has three cavities going down into the three legs. Now there exists a hybrid form, which is not quite hemispherical but has three distinct shallow depressions above the three legs, yet without having the upper part of the legs hollow, as the regular Li has. This hybrid we shall call »Li-ting». Pl. II: A 24; III: A 28.

3. »Yu».

The Yu type of vessel, Pl. XX: A 56; XXIII: A 67, A 287; XXIV: A 226; XXX: A 289, A 223.

4. »Ku» and »Tsun».

The Ku and Tsun, types of vessel. We have placed both these types of vessel under one heading, since there is really no fixed line of demarcation between them: some fairly stout Ku could equally well be called Tsun; some slender Tsun are on the verge of being Ku. We can consider Ku and Tsun to be two varieties of one fundamental type of vessel. Some forms also come very near to what is called Chï. Pl. XVII: A 269, A 107; XIX: A 283, A 219, A 124; XXI: A 108; XXII: A 110; XXXI: A 216; XXXII: A 122, A 208.

5. »Yi».

The Yi type of vessel, Pl. XVIII: A 54.

6. »Tsüe» (with »Kia»).

The Tsüe type of vessel; we include in this group also the very closely allied Kia type of vessel. Pl. IX: A 159; X: A 170; XXX: A 241.

7. »Kuang».

The Kuang type of vessel, Pl. XXXII: A 48.

8. »Cylinder legs».

Straight, cylindrical legs on the Ting tripods. Pl. I: A 1, A 2; II: A 6, A 24; III: A 28, 246; IV: A 247; V: A 20; VI: A 38; XXIX: A 5, A 11, A 9.

9. »Supporting animals».

This somewhat vague denomination indicates something very special. There is a certain type of Ting which for legs has free-sculptured dragons or birds, placed vertically so as to support the body of the vessel, and holding it in their mouths. Pl. VII: A 12, A 193; XXIX: A 39.

10. »Lid knobs».

The Kuei, Yi and certain kindred types of vessel, which have lids with a handle in the middle, have two types of handles. One is a round disc (Pl. XX: A 56), which occurs in various periods and hence is not taken here as a criterion; the other (our crit. *10*) is a real knob, either spherical or peaked in one way or another. Pl. XVIII: A 54, XXIII: A 287, XXIV: A 226; XXX: A 289, A 92.

11. »Bottle horns».

The animal's heads on the handles, particularly on those of the Kuei vessels, vary widely in both type and form. Some of them have bottle-shaped horns. Pl. XX: A 56; XXXII: A 48.

12. »Spikes».

On the surface of the vessel's body there are more or less protruding bosses, spike-like projections (to be distinguished from the »nipples» on the Chung bells of later periods). Pl. I: A 1, A 2; V: A 20; XXIX: A 5; XXXI: A 300.

13. »Segmented flanges».

There are a great many vessels which have their bodies divided in fields or panels by vertical keel-like flanges, either running from top to bottom along the whole vessel, or only over one of its horizontal sections. Such flanges are sometimes adorned with scores or notches, which give an impression of regular segments. Our group *13* has in view such segmented keel-like flanges. Pl. I: A 1, A 2; II: A 6; III: A 246; VI: A 38; VII: A 193; XIX: A 124, A 219; XXII: A 110; XXIII: A 287; XXIX: A 5, A 9; XXX: A 241; XXXII: A 122, A 208.

14. »Free animal's head».

An extremely common decorative element is the animal's head, which either crowns the upper part of a handle (we take no account of this, since it is not distinctive of periods), or is placed on the body, mostly on the neck but sometimes on the lower part, emerging as a free-sculptured, plastic element. It sometimes resembles an ox's head, sometimes a ram's, sometimes a hare's, sometimes it has practically the features of the T'ao-t'ie mask (see *15* below). It should

be emphasized that the present group *14* has not in view the animal's head adorning the *foot* of a Kuei, or even forming such a foot (cf. *51* below). The distinctive characteristic here is that it is a »*free* animal's head», i. e. it is not worked into a handle or a foot but stands out as an independent and free decorative element. Pl. IX: A 159; X: A 170; XI: A 302; XIII: A 304; XIV: A 294; XV: A 293; XX: A 56; XXIV: A 226; XXVI: A 86; XXIX: A 43; XXX: A 289, A 91, A 92; XXXI: A 135, A 300.

15. »T'ao-t'ie».

This somewhat unfortunate term, foolishly introduced by the Sung time archæologists, is so current in literature about Chinese bronzes that we had better maintain it. What the t'ao-t'ie mask was originally it is difficult to trace. We may hazard a guess that it is a dragon's head and conveys the idea of fecundity and fertility inherent in the dragon symbol (Cf. Karlgren, BMFEA II, p. 36, 37). That the dragon's head is sometimes akin to that of an ox is no obstacle — the dragon was varied in several ways; it therefore often very closely resembles the animal's head dealt with in *14* above.

There is great variety in the execution of the T'ao-t'ie.

The horns are of three principal kinds: straight, C-shaped, and C-shaped and drawn out in a point. The first is particularly common on Hien vessels, and often outlined in very realistic fashion.

The eyes are either round or drawn so as to show the corner of the eye: ⊙ or .

The face is sometimes divided into two halves by utilizing the sectional flange (see 13 above) as a nose; in that case the bottom is generally marked by nostrils. When the face is not so divided, it has various curious figures in the forehead, and particularly often a lozenge: ◇. The lips are generally curled up, and there are often tusks visible. Sometimes, though seldom, claws flank the lower part of the t'ao-t'ie head. The ears are mostly extended into points.

It is a very common trick to place other animals, and particularly the »trunked dragon» (see *19* below), antithetically, so as to form together a t'ao-t'ie. The trunks of the two »trunked dragons» thus combined go to form the nose of the t'ao-t'ie, and their eyes are at the same time the eyes of the t'ao-t'ie.

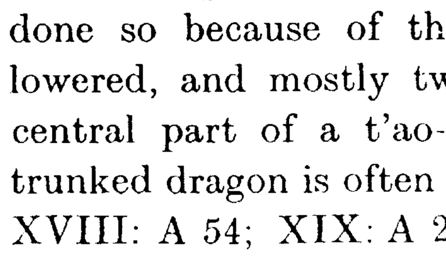
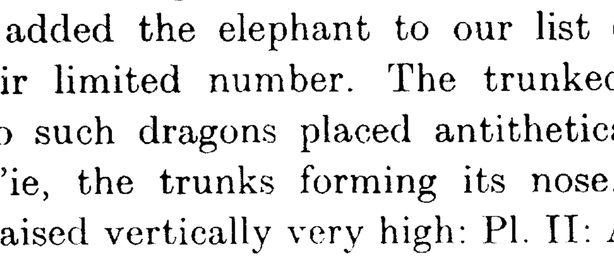
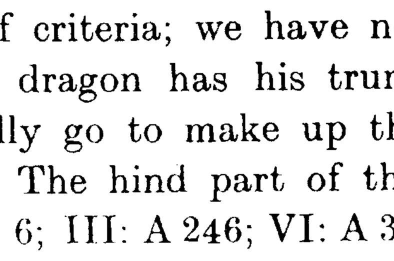
The t'ao-t'ie occurs in an infinite series of varieties, from the most realistic animal's head to the most conventionalized, vague figure, sometimes so dissolved into geometrical designs that only the symmetrically placed eyes can help us to detect it. For some variants of the t'ao-t'ie see Pl. II: A 6, A 24; III: A 28, A 246; IV: 247; VI: A 38; VII: A 193; VIII: A 260; IX: A 159; X: A 170; XIV: A 145; XVIII: A 54; XIX: A 124, A 283, A 219; XXI: A 108; XXII: A 110; XXIII: A 287; XXVII: A 181; XXVIII: A 178; XXIX: A 5; XXX: A 223 (made of *27*), A 241, A 91; XXXI: A 216, A 135, A 300 (very dissolved, made of *27*); XXXII: A 122, A 48, A 208.

16. »Common bird».

There are several shapes of birds on Chinese bronzes, and their types are sometimes of distinctive importance. By the term »common bird» — in contradistinction to »tail-raising bird» (*41* below) — we mean either the naturalistic type with fairly short tail, or the more or less stylized type with very long, extended, mainly horizontal tail: I: A 2; VIII: A 260; XIX: A 124; XX: A 56; XXX: A 92; XXXII: A 48.

17. »Gaping dragon».

This is the ordinary »Yin dragon». It varies considerably in so far as it is sometimes long drawn-out and thin, sometimes short and sturdy with forceful jaws. There is a curious phenomenon connected with the lower jaw: it sometimes coalesces with the front paw, so as to leave the upper jaw alone, looking like a kind of bird's beak: Pl. I: A 1; II: A 6; V: A 20; VI: A 38; VII: A 12; XI: A 302; XXIII: A 287; XXX: A 91; XXXII: A 48.

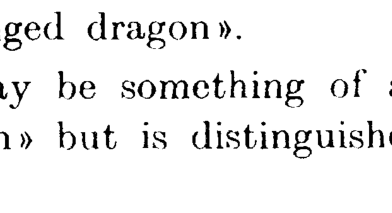
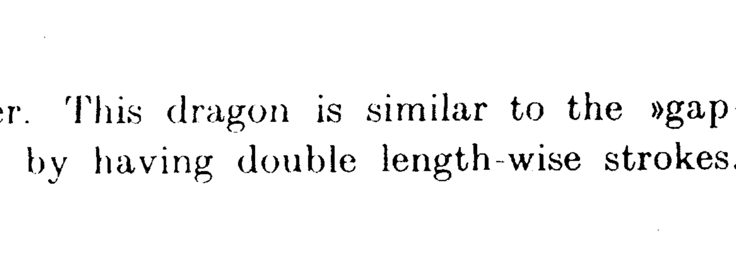




18. »Vertical dragon».

This is very closely akin to the »gaping dragon», but has the peculiarity that it is placed vertically, head downwards, flanking a t'ao-t'ie. Pl. II: A 24; III: A 28.

19. »Trunked dragon».

This animal seems to be a hybrid form between a dragon and an elephant. There are some quite realistic elephants on both Yin and Yin-Chou vessels, and we could perhaps have added the elephant to our list of criteria; we have not done so because of their limited number. The trunked dragon has his trunk lowered, and mostly two such dragons placed antithetically go to make up the central part of a t'ao-t'ie, the trunks forming its nose. The hind part of this trunked dragon is often raised vertically very high: Pl. II: A 6; III: A 246; VI: A 38; XVIII: A 54; XIX: A 219; XXIX: A 9.

20. »Winged dragon».

This may be something of a misnomer. This dragon is similar to the »gaping dragon» but is distinguished from it by having double length-wise strokes.

Some variants show that the upper stroke may really have been intended to depict a wing: Pl. VII: A 193; XI: A 302; XXIX: A 11; XXXI: A 135.




21. »Feathered dragon».

This, for want of a better short name, is what we call a very peculiar dragon-like animal with turned head and vertical fringed strokes, presumably feathers(?): XX: A 56; XXIV: A 226.

22. »Snake».

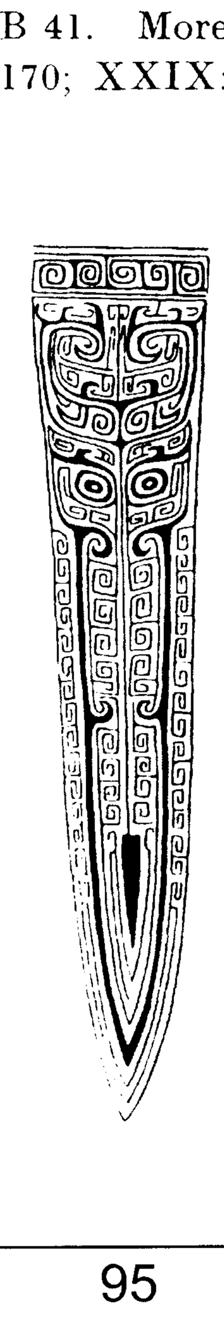
Snake. Pl. IX: A 159; XIII: A 304; XIV: A 145; XIX: A 124; XXXII A 122, 208.

23. »Cicada».

The cicada varies from a very realistic to the most conventionalized and dissolved shape. It passes, by degrees into the »blades» of *24—26* below. The strictly realistic cicada is not very common in our present material. There are several very good examples on bronzes from An-yang brought to Europe recently by Karlbeck. The realistic cicada is illustrated in Pl. XVI: B 41. More or less stylized yet still quite recognizable cicadas occur in Pl. X: A 170; XXIX: A 9 (= 25); XXXII: A 122, A 208.

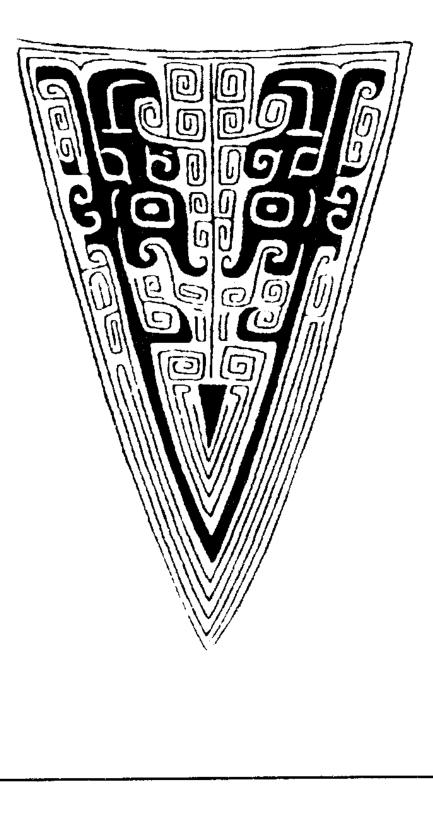
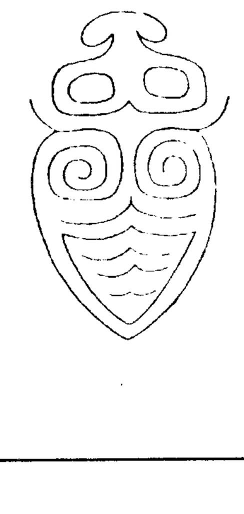
24. »Rising blade».

The cicada, drawn out into a kind of leaf or blade, or stylized into a triangular or scutiform figure, is extremely common; in *24* we have it pointing upwards: Pl. XI: A 302; XIX: A 283, A 219; XXII: A 110; XXX: A 289, A 241; XXXII: A 122, A 208.



25. »Hanging blade».

The same original cicada conventionalized into a blade or scutiform figure, pointing downwards: Pl. XXVIII: A 187; XXIX: A 9 (= *23*); XXX: A 91, 92. We give here some examples showing variants of the cicada-blade.

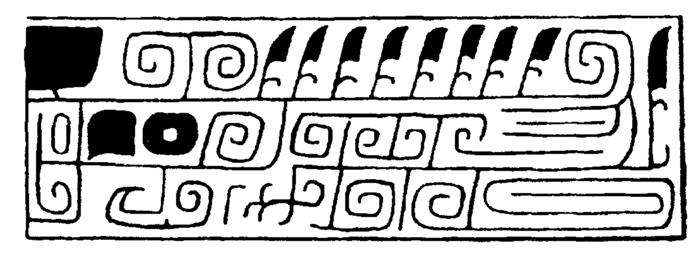




26. »Leg blade».

The cicada-blade is very often applied with fine effect to the legs, especially of the Ting and Tsüe vessels. Pl. II: A 6; V: A 20; VI: A 38; X: A 170; XXIX: A 11, A 9.

27. »Animal triple band».

This is a most curious decorative element. It is a band in three horizontal sections, which upon close examination turn out to be an extremely dissolved animal shape: in some of its best variants you can still discern a row of wing-quills at the top, and an animal's eye: IX: A 159; XXIX: A 39; XXX: A 223 XXXI: A 300.



28. »Scaled animal».

Already on the An-yang carvings there are frequently simple scales filling the bodies of animals. These recur in the Yin bronzes. They should be carefully distinguished from the scales of *55* and *56* below. Pl. I: A 2; IX: A 159; X: A 170; XXXII: A 208.

29. »Spiral filling».

Under this heading we have brought together various elements which are really very heterogeneous but are intimately connected by their function of filling up the ground between the figures of the decoration. They are simple spirals, C-shaped spirals, S-shaped spirals, T-shaped spirals:

They occur varied in several ways: with only one slight, open curve, sometimes hardly deserving the name of »spiral» but incorporated in our scheme here because of the functional connection with the rest; or with two or more bends: etc.

Another variant is that they are either round, angular (square or lozenge-shaped), extended into points or pronged:

Some of these variants have earlier been named *lei-wen* »the thunder pattern»; this is again, like the t'ao-t'ie, a somewhat risky Sung-time speculation, and we prefer to combine the whole series under the simple name of »spirals». Pl. I: A 1, A 2; II: A 6, A 24; III: A 28, A 246; V: A 20; VI: A 38; IX: A 159; XI: A 302; XIV: A 294; XVIII: A 54; XIX: A 124, A 283; XX: A 56; XXI: A 108; XXII: A 110; XXIII: A 287; XXIV: A 226; XXIX: A 5, A 11, A 9; XXX: A 289, A 241, A 91, A 92; XXXI: A 216; XXXII: A 122, A 48, A 208.

30. »Spirals on figures».

The same spirals as those just discussed under *29* sometimes occur as fillings for the bodies of animals or other figures forming the décor. Pl. II: A 6, A 24; III: A 28, 246; VI: A 38; VII: A 193; IX: A 159; XIV: A 145; XVIII: A 54; XXIII: A 287; XXX: A 91.

31. »Spiral band».

This is a horizontal band round the neck or the base of the vessel filled with one or other of the spiral variants mentioned under *29*. Pl. II: A 6, A 24, A 28; XV: A 293; XXX: A 91; XXXII: A 80.

32. »Compound lozenges».

Lozenges combined to form a large pattern filling a surface. The lozenges are sometimes empty, sometimes filled with rectangular spirals (*29*) or such-like figures. Pl. I: A 1, A 2; V: A 20; XIII: A 304; XXIX: A 43; XXX: A 289, A 223; XXXI: A 300.

33. »Interlocked T's».

The stem of each T goes to form one half of the top of the next T: Pl. XI: A 302; XXIX: A 5.

34. »Circle band».

A narrow band formed of two parallel lines filled with small circles. Pl. XIV: A 294; XV: A 293; XVII: A 107; XXIV: A 226; XXIX: A 5; XXX: A 289, A 223.

35. »Whorl circle».

Low, flat bosses, sometimes mere incised circles, with spirals curling in towards the centre. Sometimes the spirals are replaced by small circles: IX: A 159; XIII: A 304; XXVI: A 86; XXVIII: A 187; XXX: A 241, A 92.

36. »Vertical ribs».

Parallel, vertical, raised bands, lying as a kind of ribs, sometimes rounded (convex), sometimes flat, on the body. To be carefully distinguished from *54* below. Pl. XX: A 56.

37. »T scores».

The scores in the segmented flanges (*13* above) are often finished on the inner side with a transversal score, straight or slightly curved. The figure thus formed occurs not only on the flanges but also as an independent décor motif: ┤ ┤ ┐. Pl. I: A 1, A 2; II: A 6; III: A 246; VI: A 38; XIX: A 124; XXIII: A 287; XXIX: A 9; XXX: A 92.

38. »Square with crescents».

This flower-like ornament should more exactly be defined as a crescent-cornered quadrilateral. Pl. XVII: A 269; XXII: A 110; XXIV: A 226.

We shall now pass in review our 337 vessels with Yin time inscriptions and record the occurrence in them of these 38 criteria.

A 1. Ting. Wuying 1, our Pl. I. *1* square Ting; *8* cylinder legs; *12* spikes; *13* segmented flanges; *17* gaping dragon; *29* spiral filling; *32* compound lozenges; *37* T scores.
A 2. Ting. Wuying 4, our Pl. I. *1* square Ting; *8* cylinder legs; *12* spikes; *13* segmented flanges; *16* common bird; *28* scaled animal (horns); *29* spiral filling; *32* compound lozenges; *37* T scores.
A 3. Ting. Paoyün 15, also Süyi 4: 11. *1* square Ting; *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *19* trunked dragon; *22* snake; *26* leg blades; *28* scaled animal; *29* spiral filling.
A 4. Ting. Shan 3: 3. *3* square Ting; *8* cylinder legs; *13* segmented flanges; *27* animal triple band.
A 5. Ting Kukien 4: 12, our Pl. XXIX. *1* square Ting; *8* cylinder legs; *12* spikes; *13* segmented flanges; *15* t'ao-t'ie; *29* spiral filling; *33* interlocked T's; *34* circle band.
A 6. Ting. Wuying 6, our Pl. II, probably same as Po 1: 17. *1* square Ting; *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *19* trunked dragon; *26* leg blades; *29* spiral filling; *30* spirals on figures; *31* spiral band (at the base of the body); *37* T scores.
A 7. Ting. Po 1: 16. *1* square Ting; *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling; *37* T scores.
A 8. Ting. Shan 3: 2. *1* square Ting; *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *26* leg blades.
A 9. Ting. T'ao, Sü shang 15, our Pl. XXIX. *1* square Ting; *8* cylinder legs; *13* segmented flanges; *19* trunked dragon; *23* cicadas forming *25* hanging blades; *26* leg blades; *29* spiral filling; *37* T scores.
A 10. Ting. Po 1: 19. *1* square Ting; *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *19* trunked dragon; *26* leg blades; *29* spiral filling; *37* T scores.
A 11. Ting. Shan 3: 39, our Pl. XXIX. *8* cylinder legs; *20* winged dragon; *26* leg blades (very stylized); *29* spiral filling.
A 12. Ting. Umehara II: 94, our Pl. VII, Stoclet collection. *9* supporting animals; *17* gaping dragon. (Also a beginning of *40* hook projections).
A 13. Ting. Shan 2: 21. *8* cylinder legs; *15* t'ao-t'ie badly dissolved; *29* spiral filling.
A 14. Ting. Kukien 1: 5. *8* cylinder legs; *29* spiral filling; *35* whorl circle; *38* square with crescents.
A 15. Ting. Sükia 1: 1. Drawing bad and useless.
A 16. Ting. Shan 2: 14. This vessel goes stark against the general rules of cat. A. It has the following criteria of Middle Chou style treated below: 49 curved legs; 58 broad figured band. In all likelihood the vessel is spurious.
A 17. Ting. Kukien 4: 11. Too badly drawn to be relied on.
A 18. Ting. Kukien 1: 14. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *29* spiral filling; *31* spiral band.
A 19. Ting. Kukien 1: 28. *8* cylinder legs; *15* t'ao-t'ie; *22* snake; *26* leg blades; *29* spiral filling; *35* whorl circle.

A 20. Ting. Mengwei, Sü 2, our Pl. V. *8* cylinder legs; *12* spikes; *17* gaping dragon; *26* leg blades; *29* spiral filling; *32* compound lozenges.
A 21. Ting. Umehara II: 89. McLeod collection. *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *26* leg blades; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 22. Ting. Kukien 4: 15. *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *29* spiral filling; *37* T scores.
A 23. Ting. T'ao 1: 26. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *29* spiral filling.
A 24. Ting. Wuying 10, our Pl. II. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 25. Ting. Süyi 1: 42. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 26. Ting. Photo Paoyün 11, also Süyi 2: 4. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *26* leg blades; *29* spiral filling.
A 27. Ting. Kukien 1: 25. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 28. Ting. Mengwei, Sü 4, our Pl. III. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 29. Ting. Chengts'iu 2. *2* Li-ting; *8* cylinder legs; *18* vertical dragon; *29* spiral filling; *31* spiral band.
A 30. Ting. Photo Wuying 13. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 31. Ting. Photo Senoku I: 1. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 32. Ting. Huaimi 5. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *26* leg blades; *29* spiral filling; *30* spirals on figures.
A 33. Ting. Shan 2: 54. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 34. Ting. Po 1: 32. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *31* spiral band.
A 35. Ting. Photo Wuying 17. *2* Li-ting; *8* cylinder legs; *27* animal triple band.
A 36. Ting. Photo Shierkia 11: 7. *8* Cylinder legs.
A 37. Ting. Heng 5. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling; *31* spiral band.
A 38. Ting. Our Pl. VI, Lundgren collection, Stockholm. *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *18* vertical dragon; *19* trunked dragon; *26* leg blades; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 39. Ting. Shan 2: 4, our Pl. XXIX. *9* supporting animals; *27* animal triple band (very dissolved).
A 40. Ting. Sükia 1: 33. *9* supporting animals; *15* t'ao-t'ie; *29* spiral filling.
A 41. Li. Po 19: 6. *20* winged dragon; *29* spiral filling. Rather badly drawn.
A 42. Li. Ningshou 12: 27. Drawing bad and useless.
A 43. Li. Shan 3: 26, our Pl. XXIX. *14* free animal's head; *32* compound lozenges.
A 44. Hien. Photo Shuangkien 10. *15* t'ao-t'ie.
A 45. Hien. Kukien 30: 14. *15* t'ao-t'ie; *27* animal triple band (very dissolved).
A 46. Hien. Po 18: 25. *15* t'ao-t'ie; *23* cicadas stylized into *25* hanging blades; *27* animal triple band (very dissolved); *29* spiral filling.
A 47. Hien. Heng 98, also P'anku, Hia 39. *15* t'ao-t'ie; *27* animal triple band.
A 48. Kuang. T'ao 3: 34, our Pl. XXXII. *7* Kuang; *15* t'ao-t'ie; *16* common bird; *17* gaping dragon; *29* spiral filling.

A 49. Yi. Kukien 13: 6. *5* Yi; *10* lid knob; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 50. Yi. Freer Gallery. *5* Yi; *10* lid knob; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling; *30* spirals on figures.
A 51. Yi. Kukien 13: 4. *5* Yi; *10* lid knob; *13* segmented flanges; *15* t'ao-t'ie; *19* trunked dragon; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 52. Yi. Kukien 14: 2. *5* Yi; *10* lid knob; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 53. Yi. Kukien 13: 7. *5* Yi; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling; *30* spirals on figures.
A 54. Yi. Our Pl. XVIII. Belonging to Messrs. Bluett & Son. *5* Yi; *10* lid knob; *19* trunked dragon; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 55. Yi. Photo Yechung 15. *5* Yi; *10* lid knob; *13* segmented flanges; *15* t'ao t'ie; *19* trunked dragon; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 56. Yu. Freer Gallery, our Pl. XX, same in T'ao 2: 34. *3* Yu; *11* bottle horns; *14* free animal's head; *16* common bird; *21* feathered dragon; *29* spiral filling; *36* vertical ribs.
A 57. Yu. Photo Haiwai 42. *3* Yu; *10* lid knob; *11* bottle horns; *14* free animal's head; *29* spiral filling; *36* vertical ribs.
A 58. Yu. Photo Yechung 20. *3* Yu; *10* lid knob; *14* free animal's head; *32* compound lozenges; *34* circle band.
A 59. Chï. Photo Yechung 25. No distinctive features.
A 60. Yu. K'ao 4: 25. *3* Yu; *29* spiral filling; *31* spiral band; *32* compound lozenges. Poor drawing.
A 61. Yu. K'ao 4: 15. *3* Yu; *14* free animal's head.
A 62. Yu. Kukien 16: 30. *3* Yu; *14* free animal's head; *21* feathered dragon; *29* spiral filling.
A 63. Yu. Sükia 8: 9. *3* Yu; *14* free animal's head; *17* gaping dragon; *34* circle band. Poor drawing.
A 64. Yu. Our Pl. XXVI, Freer Gallery. *3* Yu; *13* segmented flanges; *16* common bird; *17* gaping dragon; *36* vertical ribs.
A 65. Yu. Po 10: 24. *3* Yu; *14* free animal's head.
A 66. Yu. Kukien 15: 25. Drawing too bad to be relied upon.
A 67. Yu. Our Pl. XXIII. Belonging to Messrs. Bluett & Son. *3* Yu. A very interesting vessel: Hu-shaped and yet with a Yu handle.
A 68. Yu. Po 11: 10. *3* Yu; *21* feathered dragon; *34* circle band.
A 69. Yu. Kukien 16: 33. *3* Yu; *10* lid knob; *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon.
A 70. Yu. Kukien 16: 22. *3* Yu; *10* lid knob; *14* free animal's head; *17* gaping dragon; *29* spiral filling; *34* circle band. Poor drawing.
A 71. Yu. Shan 4: 18. *3* Yu; *10* lid knob; *14* free animal's head; *29* spiral filling; some kind of dragon, too badly drawn to be recognizable.
A 72. Yu. Photo Paoyün 98, also Süyi 8: 8. *3* Yu; *10* lid knob; *14* free animal's head; *15* t'ao-t'ie; *22* snake; *29* spiral filling.
A 73. Yu. Shan 4: 24. *3* Yu; *10* lid knob; *14* free animal's head; *29* spiral filling. Poor drawing.
A 74. Yu. Shan 4: 32. *3* Yu; *11* bottle horns; *17* gaping dragon; *29* spiral filling; *32* compound lozenges.
A 75. Chï. Photo Shuangkien 47. No distinctive features.
A 76. Chï. Huaimi, Shang 29. *27* animal triple band.

A 77. Chï. Shïliu 2: 15. No distinctive features.
A 78. Chï. Po 16: 14. Drawing bad and useless.
A 79. Chï. Shan 5: 48. *31* spiral band.
A 80. Chï. T'ao 3: 29, our Pl. XXXII. *31* spiral band.
A 81. Hu. Sükia 5: 19. Drawing bad and useless.
A 82. Hu. Kukien 18: 1. *27* animal triple band.
A 83. Hu. Photo Paoyün 84, also Süyi 8: 39. *15* t'ao-t'ie (very dissolved); *31* spiral band.
A 84. Chï. Kukien 26: 9. Drawing bad and useless.
A 85. Lei. Huaimi, Shang 9. *13* segmented flanges; *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *19* trunked dragon; *20* winged dragon; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 86. Lei. Umehara II: 130, our Pl. XXVI. Seligman collection. *14* free animal's head; *35* whorl circle.
A 87. Lei. Shan 4: 40. *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *23* cicadas turned into *25* hanging blades; *29* spiral filling; *30* spirals on figures; *35* whorl circle.
A 88. Lei. Kukien 19: 14. *10* lid knob; *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *19* trunked dragon; *25* hanging blades; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 89. Lei. Shan 4: 39. Drawing too primitive.
A 90. Lei. Huaimi, Shang 8. *13* segmented flanges; *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *19* trunked dragon; *20* winged dragon; *29* spiral filling; *30* spirals on figures; *31* spiral band; *37* T scores.
A 91. Lei. T'ao, Sü hia 5, our Pl. XXX. *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon *25* hanging blades; *29* spiral filling; *30* spirals on figures; *31* spiral band.
A 92. Lei. Chengts'iu 29, our Pl. XXX. *10* lid knob; *14* free animal's head; *16* common bird; *25* hanging blades; *29* spiral filling; *31* spiral band; *35* whorl circle.
A 93. Tsun. Photo Paoyün 99, also Süyi 5: 3. *4* Tsun; *15* t'ao-t'ie; *29* spiral filling(?).
A 94. Tsun. Po 6: 12. Drawing bad and useless.
A 95. Tsun. Photo Paoyün 103, also Süyi 5: 18. *4* Tsun, *15* t'ao-t'ie; *24* rising blades.
A 96. Tsun. Kukien 8: 38. *4* Tsun; *15* t'ao-t'ie; *18* vertical dragon; *29* spiral filling. Poor drawing.
A 97. Tsun. Shan 4: 80. *4* Tsun; *15* t'ao-t'ie made of *19* trunked dragon; *29* spiral filling.
A 98. Tsun. Shan 4: 59. *4* Tsun; *38* square with crescents.
A 99. Tsun. Shan 4: 87. *4* Tsun.
A 100. Ku. Ningshou 10: 21. *4* Ku; *15* t'ao-t'ie.
A 101. Ku. Huaimi, Shang 15. *4* Ku; *15* t'ao-t'ie.
A 102. Ku. Shan 4: 67. *4* Ku; *15* t'ao-t'ie; *29* spiral filling.
A 103. Tsun. Kukien 10: 11. *4* Tsun; *15* t'ao-t'ie; *29* spiral filling; *30* spirals on figures.
A 104. Ku. Oeder collection. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *19* trunked dragon; *22* snake; *24* rising blades; *29* spiral filling; *30* spirals on figures.
A 105. Ku. Photo Paoyün 113, also Süyi 5: 20. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling.
A 106. Ku. Shan 5: 35. *4* Ku; *15* t'ao-t'ie; *17* gaping dragon; *22* snake; *24* rising blades.
A 107. Ku. Mrs. Holmes collection, our Pl. XVII. *4* Ku; *34* circle band.
A 108. Tsun. Our Pl. XXI, National Museum, Stockholm. *4* Tsun. *15* t'ao-t'ie; *29* spiral filling.
A 109. Tsun. Kukien 8: 35. *4* Tsun; *13* segmented flanges; *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *18* vertical dragon; *24* rising blades; *29* spiral filling; *37* T scores. Poor drawing.

A 110. Ku. Wuying 133, our Pl. XXII. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *38* square with crescents.
A 111. Ku. Kukien 23: 26. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *30* spirals on figures.
A 112. Ku. Kukien 24: 4. *4* Ku; *34* circle band; for the rest drawing too indistinct.
A 113. Ku. T'ao 3: 26. *4* Ku; *29* spiral filling.
A 114. Ku. Royal Scottish Museum. *4* Ku; *15* T'ao-t'ie.
A 115. Ku. Po 15: 35. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling.
A 116. Ku. Illustrated London News No. 5005 (vase from An-yang). *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling.
A 117. Ku. Photo Umehara, Henkin no kökogaku teki kösatsu Pl. XVII, same as T'ao 1: 8 (Altar set in Metropolitan Museum of Art). *4* Ku; *15* t'ao-t'ie; *22* snake; *24* rising blades.
A 118. Ku. Ningshou 10: 20. *4* Ku; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *31* spiral band.
A 119. Ku. Photo Umehara I: 53. Mrs. Christian Holmes collection. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *19* trunked dragon; *22* snake; *24* rising blades; *29* spiral filling; *30* spirals on figures.
A 120. Ku. Kukien 24: 24. *4* Ku; *15* t'ao-t'ie.
A 121. Ku. Ningshou 10: 19. *4* Ku; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling.
A 122. Ku. Shan 5: 14, our Pl. XXXII. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *22* snake; *23* cicada; *24* rising blades; *29* spiral filling.
A 123. Ku. Po 15: 28. Drawing bad and useless.
A 124. Ku. Senoku II: 90, our Pl. XIX. *4* Ku; *13* segmented flanges; *15* t'ao-t'ie; *16* common birds; *22* snake; *24* rising blades; *28* scaled animal; *29* spiral filling; *31* spiral band; *37* T scores.
A 125. Ku. T'ao 3: 27. *4* Ku; *15* t'ao-t'ie (very dissolved); *29* spiral filling.
A 126. Ku. Shan 5: 44. *4* Ku; *13* segmented flanges; *29* spiral filling; *31* spiral band; *15* t'ao-t'ie in a very unusual variant (made up of two snake-dragons facing each other) — the drawing may be unsatisfactory.
A 127. Kuei. Heng 42, also P'anku, Shang 37. *13* segmented flanges; *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *19* trunked dragon; *24* rising blades; *29* spiral filling; *37* T scores.
A 128. Square Kuei. Picture postcard series of the Peking Palace Museum. *15* t'ao-t'ie; *17* gaping dragon.
A 129. Kuei. K'ao 4: 44. Drawing bad and useless.
A 130. Kuei. Photo Shuangkien 18. *14* free animal's head; *32* compound lozenges.
A 131. Kuei. Photo Sungchai 7. No distinctive features.
A 132. Po 6: 25. No distinctive features.
A 133. Kuei foot. Photo Mengwei, Shang 19. No distinctive features.
A 134. Kuei. Shan 8: 19. *14* free animal's head; *15* t'ao t'ie; *18* vertical dragon; *35* whorl circle; *37* T scores.
A 135. Kuei. Chengts'iu 14, our Pl. XXXI. *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *20* winged dragon.
A 136. Kuei. Ningshou 6: 8. Drawing bad and useless.
A 137. Kuei. BMFEA 6, Pl. XVII, belongs to Mr. E. Trygger. *14* free animal's head; *27* animal triple band.
A 138. Kuei. Ch'angan 1: 16, also P'anku, Shang 26. *12* spikes (apparently); *14* free animal's head; *31* spiral band; *34* circle band.

A 139. Kuei. Kukien 13: 2. *14* free animal's head; *27* animal triple band.
A 140. Kuei. Shan 8: 15. *14* free animal's head; *15* t'ao-t'ie made of *27* animal triple band.
A 141. Kuei. Sükia 6: 36. *14* free animal's head; *17* gaping dragon; *29* spiral filling.
A 142. Kuei. Photo Umehara II: 109. Buckingham collection. *14* free animal's head; *15* t'ao-t'ie; *21* feathered dragon (somewhat abbreviated); *29* spiral filling; for the rest indistinct photo.
A 143. Kuei. Photo Wuying 56. *14* free animal's head; *15* t'ao-t'ie; *19* trunked dragon; *20* winged dragon; *29* spiral filling.
A 144. Kuei. Photo Senoku I: 37. *14* free animal's head; *15* t'ao-t'ie (?); *17* gaping dragon; *29* spiral filling; *33* interlocked T's.
A 145. Kuei. Wuying 40, our Pl. XIV. *15* t'ao-t'ie; *22* snake; *30* spirals on figures.
A 146. Kuei. Kukien 13: 17. *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *18* vertical dragon.
A 147. Tsüe. Photo Umehara I: 63. Ford collection. Umehara expresses certain doubts about this vessel. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *26* leg blades; *29* spiral filling.
A 148. Tsüe. T'ao, Sü hia 11. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *26* leg blades; *29* spiral filling. (This is not the same vessel as A 147, though they are very similar).
A 149. Tsüe. Photo Mengwei, Shang 43, also T'ao 3: 13. *6* Tsüe; *15* t'ao-t'ie; *29* spiral filling; *30* spirals on figures; *35* whorl circle.
A 150. Tsüe. Shan 7: 60. *6* Tsüe; *11* bottle horns; *13* segmented flanges; *15* t'ao-t'ie (very dissolved); *26* leg blades; *29* spiral filling.
A 151. Tsüe. Kukien 26: 47. *6* Tsüe; *11* bottle horns; *13* segmented flanges (?); *15* t'ao-t'ie (badly dissolved); *26* leg blades.
A 152. Tsüe. Shan 6: 52. *6* Tsüe; *29* spiral filling; *35* whorl circle; probably a *15* t'ao-t'ie, the elements of which are not sufficiently visible in the drawing.
A 153. Tsüe. K'ao 5: 8. *6* Tsüe; *29* spiral filling; *35* whorl circle.
A 154. Tsüe. Photo Sungchai 19. *6* Tsüe; *15* t'ao-t'ie (very dissolved).
A 155. Tsüe. Photo Umehara I: 5, same as T'ao 1: 11, altar set of the Metropolitan Museum. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie; *26* leg blades; *28* scaled animal; *29* spiral filling; *31* spiral band.
A 156. Tsüe. Photo Senoku II: 76. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *30* spirals on figures.
A 157. Tsüe. Shan 6: 70. *6* Tsüe; *15* t'ao-t'ie (very dissolved); *29* spiral filling; *35* whorl circle.
A 158. Tsüe. Illustrated London News No. 5009 (vessel found at An-yang). *6* Tsüe; *15* t'ao-t'ie; *35* whorl circle.
A 159. Tsüe. Our Pl. IX, Seligman collection. *6* Tsüe; *14* free animal's head; *15* t'ao-t'ie; *22* snake; *27* animal triple band; *28* scaled animal; *29* spiral filling; *30* spirals on figures; *35* whorl circle.
A 160. Tsüe. Shan 6: 58. *6* Tsüe; *35* whorl circle.
A 161. Tsüe. Kukien 23: 1. *6* Tsüe; *35* whorl circle.
A 162. Tsüe. Shan 6: 19. *6* Tsüe.
A 163. Tsüe. Shan 7: 18. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *35* whorl circle.
A 164. Tsüe. Shan 7: 17. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *35* whorl circle.
A 165. Tsüe. Shan 7: 56. *6* Tsüe; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *34* circle band.

A 166. Tsüe. T'ao 3: 20. 6 Tsüe; 31 spiral band; 35 whorl circle.
A 167. Tsüe. Shan 7: 27. 6 Tsüe; 29 spiral filling; 35 whorl circle.
A 168. Tsüe. Heng 71. 6 Tsüe; 35 whorl circle; poor drawing.
A 169. Tsüe. T'ao, Sü hia 12. 6 Tsüe; 15 t'ao-t'ie; 28 scaled animal.
A 170. Tsüe. Photo Umehara I: 65, Holmes collection. our Pl. X. 6 Tsüe; 14 free animal's head(?); 15 t'ao-t'ie; 23 cicadas forming 26 leg blades; 28 scaled animal.
A 171. Tsüe. Po 14: 6. 6 Tsüe; 24 rising blades; 29 spiral filling; 31 spiral band; 38 square with crescents.
A 172. Tsüe. Po 16: 16. 6 Tsüe; 15 t'ao-t'ie; 26 leg blades; 29 spiral filling.
A 173. Tsüe. Kukien 26: 46. 6 Tsüe; 15 t'ao-t'ie; 26 leg blades; 29 spiral filling. Poor drawing.
A 174. Kia. Chengts'iu 43. 15 t'ao-t'ie; 24 rising blades; 29 spiral filling; 31 spiral band.
A 175. Ho. Ningshou 12: 40. 15 t'ao-t'ie; 19 trunked dragon; 24 rising blades; 29 spiral filling.
A 176. Ho. Shan 9: 22. No distinctive features.
A 177. Nao bell. Sükia 17: 30. 15 t'ao-t'ie. Ineptly drawn, yet obviously of the same type as next.
A 178. Nao bell. Wuying 151, our Pl. XXVIII. 15 t'ao-t'ie.
A 179. Nao bell. Shan 1: 39. 15 t'ao-t'ie.
A 180. Bell. Illustrated London News No. 5005. Bell found at An-yang; plain, of a very unusual type.
A 181. Lid of a Kuei. Our Pl. XXVII, also Mengwei, Sü 10; belonging to the MFEA. 15 t'ao-t'ie.
A 182. Lid of a Yu. Shan 4: 5. No distinctive features.
A 183. Tiger. Shan 4: 95. Too badly drawn to allow of any conclusions.
A 184. Owl. Shan 4: 96. 13 segmented flanges; 28 scaled animal; 30 spirals on figures.
A 185. Owl. Umehara I: 41, same as Heng 47, Mrs. Christian Holmes collection. 28 scaled animal; 30 spirals on figures.
A 186. Lid of a Tsüe. Photo Mengwei, Shang 50. Very doubtful.
A 187. Axe. Senoku III: 135, our Pl. XXVIII. 23 cicadas turned into 25 hanging blades; 35 whorl circle (dissolved).
A 188. Hien. T'ao, Sü hia 2. This vessel has a quite irregular combination of 15 t'ao-t'ie with crit. 58 below (broad figured band), which is typical of Middle Chou; it is probably spurious.
A 189. Ih. Shan 9: 37. This vessel is typical Middle Chou (crit. 46, 53, 58 below) in spite of the Ya hing; it is probably spurious. This is confirmed by the fact that besides the Ya hing it has an inscription identical with that of A 188, which also goes stark against the general rules. They are both of the same forger's hand.
A 190. Ting. Ningshou 1: 30. 1 square Ting; 8 cylinder legs; 20 winged dragon (badly drawn); 29 spiral filling.
A 191. Ting. Photo Shuangkien 6. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 29 spiral filling.
A 192. Ting. Kukien 3: 31. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 26 leg blades; 29 spiral filling.
A 193. Ting. Wuying 18, our Pl. VII. 9 supporting animals; 13 segmented flanges; 15 t'ao-t'ie; 19 trunked dragon; 29 spiral filling; 30 spirals on figures.
A 194. Ting. Photo Mengwei, Shang 14. 8 cylinder legs.
A 195. Ting. Huaimi, Shang 2. 2 Li-ting; 8 cylinder legs; 27 animal triple band.
A 196. Li. Wuying 36, our Pl. V. We know of no example of this plain, original kind of Li in Chou time.

A 197. Li with handle and two knobs. Set of picture postcards of the Peking Palace Museum. 35 whorl circle.
A 198. Li of the same type as A 197. Shan 7: 68.
A 199. Hien. Kukien 12: 2, also in the picture postcard set of the Peking Palace Museum. 15 t'ao-t'ie; 27 animal triple band.
A 200. Hien. Ch'angan 1: 26. 15 t'ao-t'ie; 27 animal triple band.
A 201. Chï. Shan 5: 77. Drawing bad and useless.
A 202. Chï. K'ao 4: 35. No distinctive features.
A 203. Chï. Huaimi, Shang 30. 27 animal triple band (very dissolved).
A 204. Chï. Huaimi, Shang 28. 31 spiral band.
A 205. Kuang. Sükia 14: 33. 7 Kuang; 11 bottle horns; 15 t'ao-t'ie; 17 gaping dragon; 29 spiral filling; 37 T scores.
A 206. Po 20: 33. Drawing bad and useless.
A 207. Ting with handle (Ho?). Photo Wuying 126. 8 cylinder legs.
A 208. Tsun. T'ao 1: 45, our Pl. XXXII. 4 Tsun; 13 segmented flanges; 15 t'ao-t'ie; 22 snake; 23 cicadas made into 24 rising blades; 28 scaled animal; 29 spiral filling.
A 209. Ku. Shïerkia 4: 15. 4 Ku; 15 t'ao-t'ie; 24 rising blades; 29 spiral filling; 30 spirals on figures; 31 spiral band.
A 210. Tsun. Ningshou 3: 8. The vessel looks very doubtful.
A 211. Ku. Shan 5: 28. 4 Ku; 15 t'ao-t'ie (very dissolved); 29 spiral filling; 34 circle band.
A 212. Tsun. Paoyün 104, also Süyi 5: 4. 4 Tsun; 13 segmented flanges; 15 t'ao-t'ie; 24 rising blades.
A 213. Tsun. Shan 4: 90. 4 Tsun; 15 t'ao-t'ie made of 19 trunked dragons; 29 spiral filling.
A 214. Tsun. Ningshou 3: 29. 4 Tsun; 15 t'ao-t'ie.
A 215. Tsun. Kukien 8: 10. 4 Tsun; 15 t'ao-t'ie; 29 spiral filling.
A 216. Tsun. Shan 4: 81, our Pl. XXXI. 4 Tsun; 15 t'ao-t'ie; 29 spiral filling.
A 217. Tsun. Set of picture postcards of the Peking Palace Museum. 4 Tsun; 15 t'ao-t'ie.
A 218. Ku. Kukien 23: 21. 4 Ku; 13 segmented flanges; 15 t'ao-t'ie; 19 trunked dragon; 24 rising blades.
A 219. Ku. Mengwei, Sü 27, our Pl. XIX. 4 Ku; 13 t'ao-t'ie; 19 trunked dragon; 24 rising blades.
A 220. Yu. K'ao 4: 24. 3 Yu; 10 lid knob; 11 bottle horns; 14 free animal's head; 34 circle band. Poor drawing.
A 221. Yu. Shan 4: 13. 3 Yu; 10 lid knob; 14 free animal's head — for the rest indistinct (poor drawing).
A 222. Yu. T'ao, Sü shang 40, also Kukien 16: 37. 3 Yu; 11 bottle horns; 14 free animal's head; 16 common bird; 29 spiral filling.
A 223. Yu. Ch'angan 1: 20, our Pl. XXX. 3 Yu; 15 t'ao-t'ie made of 27 animal triple band; 32 compound lozenges; 34 circle band.
A 224. Yu. Set of picture postcards from the Peking Palace Museum. 3 Yu; 10 lid knob; 11 bottle horns; 14 free animal's head; 34 circle band; for the rest indistinct.
A 225. Yu. Kukien 15: 35. 3 Yu; 11 bottle horns; 27 animal triple band; 31 spiral band.
A 226. Yu. Hakkaku 12, our Pl. XXIV. 3 Yu; 10 lid knob; 14 free animal's head; 21 feathered dragon; 29 spiral filling; 34 circle band; 38 square with crescents.
A 227. Yu. T'ao 2: 36. 3 Yu; 10 lid knob; 14 free animal's head; 15 t'ao-t'ie; 17 gaping dragon.

A 228. Yu. T'ao 2: 37. 3 Yu; 13 segmented flanges; 16 common bird; 29 spiral filling; 36 vertical ribs; 37 T scores.
A 229. Yu. Kukien 16: 38. 3 Yu; 10 lid knob; 14 free animal's head; 15 t'ao-t'ie; 17 gaping dragon; 34 circle band.
A 230. Yu. Freer Gallery. 3 Yu; 10 lid knob; 14 free animal's head.
A 231. Ho. Set of picture postcards of the Peking Palace Museum. 21 feathered dragon; for the rest indistinct.
A 232. Ho. Chengts'iu 49. 16 common bird; 20 winged dragon.
A 233. Kuei. Heng 43. 12 spikes; 14 free animal's head; 31 spiral band (yet interrupted by eyes as if of a rudimentary 15 t'ao-t'ie); 32 compound lozenges.
A 234. Kuei. Po 8: 9. 14 free animal's head; 17 gaping dragon; 20 winged dragon.
A 235. Kuei. Kukien 13: 16. 14 free animal's head; 29 spiral filling; 35 whorl circle; 38 square with crescents.
A 236. Tsüe. Photo Senoku II: 75. 6 Tsüe; 13 segmented flanges; 15 t'ao-t'ie; 24 rising blades; 29 spiral filling; 35 whorl circle.
A 237. Tsüe. Photo Mengwei, Shang 48. 6 Tsüe; 15 t'ao-t'ie; 29 spiral filling; 35 whorl circle(?).
A 238. Tsüe. Po 14: 23. 6 Tsüe; 35 whorl circle.
A 239. Tsüe. Freer Gallery. 6 Tsüe; 15 t'ao-t'ie; 26 leg blades; 30 spirals on figures.
A 240. Küe. Huaimi, Shang 18. 6 Küe; 15 t'ao-t'ie (very dissolved).
A 241. Tsüe. T'ao 3: 16, our Pl. XXX. 6 Tsüe; 13 segmented flanges; 15 t'ao-t'ie; 24 rising blades; 29 spiral filling; 35 whorl circle.
A 242. Lid of a Yu(?). Photo Sungchai 16. 31 spiral band; 34 circle band.
A 243. Lid. of a Yu. P'anku, Hia 40. 10 lid knob; 17 gaping dragon.
A 244. Lid of a Yu. Chengts'iu 35. 27 animal triple band; 34 circle band.
A 245. Ting. Po 3: 7. 8 cylinder legs; 13 segmented flanges; 15 t'ao-t'ie; 29 spiral filling; 37 T scores.
A 246. Ting. Hakkaku 2, our Pl. III. 8 cylinder legs; 13 segmented flanges; 15 t'ao-t'ie; 19 trunked dragon; 29 spiral filling; 30 spirals on figures; ; 37 T scores.
A 247. Ting. Wuying 21, our Pl. IV. 8 cylinder legs; 15 t'ao-t'ie, strongly dissolved, somewhat reminding of 27 animal triple band, and with 19 trunked dragon discernible, though badly corrupted.
A 248. Ting. Kukien 3: 5. 8 cylinder legs; 27 animal triple band.
A 249. Ting. Photo Paoyün 21, also Süyi 1: 45. 8 cylinder legs; 13 segmented flanges; 15 t'ao-t'ie; 29 spiral filling.
A 250. Ting. Kukien 3: 6. Drawing bad and useless.
A 251. Ting. T'ao 1: 21. 8 cylinder legs.
A 252. Ting. Shan 2: 35. 8 cylinder legs; 17 gaping dragon; 29 spiral filling. Poor drawing.
A 253. Ting. T'ao 1: 19. 8 cylinder legs; 12 spikes; 17 gaping dragon; 29 spiral filling; 32 compound lozenges.
A 254. Ting. T'ao 1: 22. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 18 vertical dragon; 29 spiral filling; 30 spirals on figures; 31 spiral band.
A 255. Ting. Photo Umehara II: 91. Museum of Fine Arts, Boston. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 18 vertical dragon; 29 spiral filling; 30 spirals on figures; 31 spiral band.
A 256. Ting. Ningshou 1: 33. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 18 vertical dragon; 29 spiral filling; 30 spirals on figures; 31 spiral band.
A 257. Ting. Huaimi, Shang 3. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 18 vertical dragon; 29 spiral filling; 30 spirals on figures; 31 spiral band.

A 258. Ting. Heng 7. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 18 vertical dragon; 29 spiral filling; 31 spiral band.
A 259. Ting. Kukien 3: 4. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 26 leg blades.
A 260. Hien. Our Pl. VIII, Hellström collection. 15 T'ao-t'ie; 16 common bird.
A 261. Hien. Sükia 23: 25. Drawing bad and useless.
A 262. Hien. T'ao, Sü hia 1. 15 t'ao-t'ie; 27 animal triple band.
A 263. Hien. Ningshou 12: 7. 15 t'ao-t'ie; 27 animal triple band.
A 264. Tsun. Chengts'iu 49. 4 Tsun; 15 t'ao-t'ie; 29 spiral tilling; 30 spirals on figures.
A 265. Tsun. K'ao 5: 14. 4 Tsun; 15 t'ao-t'ie; 29 spiral filling; 34 circle band.
A 266. Tsun. Bestände der Firma Dr. Otto Burchard & Co., Chinesische Kunst, II Teil, Pl. 1127. 4 Tsun; 15 t'ao-t'ie.
A 267. Tsun. Kukien 9: 3. 4 Tsun; 21 feathered dragon; 29 spiral filling.
A 268. Tsun. Kukien 9: 2. 4 Tsun; 21 feathered dragon; 29 spiral filling.
A 269. Tsun. Our Pl. XVII, Oeder collection. 4 Tsun; 38 square with crescents.
A 270. Chï. Kukien 26: 18. No distinctive features.
A 271. Chï. Shan 5: 65. No distinctive features.
A 272. Chï. Shan 5: 51. No distinctive features.
A 273. Chï. Photo Shungkien 48. No distinctive features.
A 274. Chï. Kukien 9: 5. 14 free animal's head; 16 common bird; 29 spiral filling.
A 275. Chï. Lianglei 2: 18. No distinctive features.
A 276. Chï. Kukien 26: 17. 16 common bird; 29 spiral filling. Poor drawing.
A 277. Ku. Chengts'iu 39. 4 Ku; 15 t'ao-t'ie; 34 circle band.
A 278. Ku. Photo Umehara I: 56, Wannieck collection. 4 Ku; 15 t'ao-t'ie; 29 spiral filling.
A 279. Ku. Po 7: 3. 4 Ku; 13 segmented flanges; 15 t'ao-t'ie; 24 rising blades.
A 280. Ku. Photo Wuying 137. 4 Ku; 13 segmented flanges; 15 t'ao-t'ie; 19 trunked dragon; 24 rising blades; 29 spiral filling; 37 T scores.
A 281. Ku. Shan 5: 4. 4 Ku; 15 t'ao-t'ie; 19 trunked dragon; 24 rising blades; 29 spiral filling; 30 spirals on figures; 31 spiral band; 38 square with crescents.
A 282. Ku. Kukien 23: 37. 4 Ku; 29 spiral filling; 34 circle band. Poor drawing.
A 283. Ku. Our Pl. XIX. Seligman collection. 4 Ku; 15 t'ao-t'ie (very dissolved); 24 rising blades; 29 spiral filling.
A 284. Kuang. Kukien 32: 13. 7 Kuang; 13 segmented flanges; 15 t'ao-t'ie; 17 gaping dragon; 19 trunked dragon; 28 scaled animal; 29 spiral filling; 30 spirals on figures; 31 spiral band; 34 circle band; 35 whorl circle. In part ineptly drawn.
A 285. Kuang. Kukien 32: 14. 7 Kuang; 16 common bird; 29 spiral filling.
A 286. Yu. Kukien 7: 13, there very badly drawn; a picture postcard from the Peking Palace Museum shows it to be a quite good vessel. 3 Yu; 14 free animal's head; 16 common bird.
A 287. Yu. Senoku 72, our Pl. XXIII. 3 Yu; 10 lid knob; 13 segmented flanges; 15 t'ao-t'ie; 17 gaping dragon; 29 spiral filling; 30 spirals on figures; 37 T scores.
A 288. Yu. Photo Umehara I: 82, Menten collection. 3 Yu; 11 bottle horns; 16 common bird; 29 spiral filling.
A 289. Yu. Shan 4: 19, our Pl. XXX. 3 Yu; 10 lid knob; 14 free animal's head; 24 rising blades; 29 spiral filling; 32 compound lozenges; 34 circle band.
A 290. Yu. Shan 4: 6. 3 Yu; 10 lid knob; 14 free animal's head; 31 spiral band; 34 circle band.
A 291. Yu. Kukien 16: 16. 3 Yu; 31 spiral band; 34 circle band.
A 292. Yu. Heng 58. 3 Yu. 31 spiral band; 34 circle band (very similar to but not the same vessel as 291).

A 293. Kuei. Wuying 61, our Pl. XV. *14* free animal's head; *31* spiral band; *34* circle band.
A 294. Kuei. Our Pl. XIV, Hellström collection. *14* free animal's head; *29* spiral filling; *34* circle band.
A 295. Kuei. Süyi 6: 44. *14* free animal's head; *29* spiral filling; *35* whorl circle; *38* square with crescents.
A 296. Kuei. Kukien 6: 14. *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon.
A 297. Kuei. Sükia 7: 15. *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling.
A 298. Kuei. Sükia 7: 14. *14* free animal's head; *15* t'ao-t'ie; *16* common bird. Ineptly drawn.
A 299. Kuei. Shan 8: 5. *14* free animal's head; *27* animal triple band (very dissolved).
A 300. Kuei. Shan 8: 16, our Pl. XXXI. *12* spikes; *14* free animal's head; *15* t'ao-t'ie made of *27* animal triple band; *32* compound lozenges.
A 301. Kuei. Sükia 6: 19. *14* free animal's head; *15* t'ao-t'ie; *24* rising blades; *35* whorl circle (dissolved).
A 302. Kuei. Shuangkien 19, our Pl. XI. *14* free animal's head; *17* gaping dragon; *20* winged dragon; *24* rising blades; *29* spiral filling; *33* interlocked T's.
A 303. Kuei. Kukien 13: 36. *14* free animal's head; *32* compound lozenges; *34* circle band.
A 304. Kuei. Our Pl. XIII, Oeder collection. *14* free animal's head; *22* snake; *32* compound lozenges; *35* whorl circle.
A 305. Po 8: 7. *12* spikes; *14* free animal's head; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling; *32* compound lozenges. In part badly drawn.
A 306. Kuei. Photo Paoyün 58, also Süyi 6: 45. *13* segmented flanges; *14* free animal's head; *15* t'ao-t'ie; *19* trunked dragon; *29* spiral filling.
A 307. Ho. Shan 9: 25. *27* animal triple band.
A 308. Ho. Sükia 14: 25. *10* lid knob; *24* rising blades; *29* spiral filling.
A 309. Lei. Photo Senoku Zoku 173. *10* lid knob; *14* free animal's head; *35* whorl circle.
A 310. Tsüe. Heng 70, also Shan 7: 36. *6* Tsüe; *29* spiral filling.
A 311. Tsüe. K'ao 5: 4. *6* Tsüe; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *35* whorl circle.
A 312. Tsüe. Shan 6: 62. *6* Tsüe.
A 313. Tsüe. Po 14: 26. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *35* whorl circle.
A 314. Tsüe. Shan 7: 6. *6* Tsüe; *13* segmented flanges; *15* t'ao-t'ie (very dissolved); *24* rising blades; *29* spiral filling.
A 315. Tsüe. Shan 6: 9. *6* Tsüe; *35* whorl circle.
A 316. Tsüe. K'ao 5: 10. Drawing bad and useless.
A 317. Tsüe. Shan 6: 60. *6* Tsüe; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling.
A 318. Tsüe. Shan 6: 7. *6* Tsüe; *35* whorl circle.
A 319. Tsüe. Shan 6: 41. *6* Tsüe; *15* t'ao-t'ie (very dissolved); *29* spiral filling; *35* whorl circle.
A 320. Tsüe. Shan 7: 26. *6* Tsüe; *35* whorl circle.
A 321. Tsüe. Shan 7: 9. *6* Tsüe; *27* animal triple band; *35* whorl circle.
A 322. Tsüe. Kukien 23: 3. *6* Tsüe; *27* animal triple band. *35* whorl circle.
A 323. Yi. Eumorfopoulos I, pl. XV. *10* lid knob; *13* segmented flanges; *15* tao-t'ie; *17* gaping dragon; *19* trunked dragon; *29* spiral filling; *30* spirals on figures; *37* T scores.
A 324. Ting. Shïerkia 11: 8. *8* cylinder legs.
A 325. Yu. Shïerkia 11: 12. *3* Yu.

A 326. Tsun. Shïerkia 11: 11. *4* Tsun.
A 327. Ku. Shïerkia 11: 14. *4* Ku.
A 328. Tsüe. Shïerkia 11: 16. *6* Tsüe.
A 329. Tsüe. Shïerkia 11: 17. *6* Tsüe.
A 330. Chï. Shïerkia 6: 15. *31* spiral band.
A 331. Chï. Shïerkia 4: 16. *31* spiral band: a type of band from which by certain modifications one of the variants of crit. *38* below is derived.
A 332. Axe. Shïerkia 4: 30. *25* hanging blades.
A 333. Small bell. Shïerkia 1: 8. Same type as A 180.
A 334. Square Ting. Shïerkia 7: 2. *1* square Ting; *8* cylinder legs; *12* spikes; *13* segmented flanges; *29* spiral filling; *35* whorl circle (dissolved); *37* T scores.
A 335. Ting. Shïerkia 1: 1. *1* square Ting; *13* segmented flanges; *15* t'ao-t'ie; *17* gaping dragon; *29* spiral filling.
A 336. Li. Shïerkia 7: 10. Plain Li of the same type as A 196.
A 337. Kuei. Shïerkia 12: 17. *14* free animal's head; *15* t'ao-t'ie; *24* rising blades; *29* spiral filling; *30* spirals on figures; *31* spiral band; *34* circle band.

Let us sum up the results of this scrutiny of our vessels A 1—337 with Yin time inscriptions. We have had to eliminate 34 vessels as being of too poor a quality or too badly illustrated to be of any use, or too indifferent and void of distinctive features to allow of any conclusions (15, 17, 42, 59, 66, 75, 77, 78, 81, 84, 89, 94, 123, 129, 131—133, 136, 176, 182, 183, 186, 201, 202, 206, 210, 250, 261, 270—273, 275, 316). The remaining 303 are remarkably consistent in type and decoration: there are altogether 3 vessels (16, 188, 189) which deviate from the definition of the Yin style contained in the criteria 1—38 above. It is certainly no exaggeration to state that these exceptional cases cannot in the slightest degree confute the general rules established with the aid of the 300 vessels which present criteria 1—38. The 3 exceptions must either be recent forgeries or else have been made in middle or late Chou time and quite exceptionally furnished with archaized inscriptions (*ya hing, si tsï sun, kü*).

THE YIN-CHOU STYLE.

On pp. 30—39 above (Cat. B I) we have recorded 64 illustrated vessels which from their inscriptions can be dated in the first half (1122—947) of the Western Chou period. The style of these vessels, what we shall call here the Yin-Chou style, is not so much a new style as a continuation of the Yin style. Examples of the Yin criteria in Yin-Chou style occur in our illustrations as follows:

3. Yu: Pl. XXIV: B 163; XXXII: B 30.
4. Tsun, Ku: Pl. XXI: B 36; XXII: B 31; XXXI: C 139.
5. Yi: Pl. XVIII: B 24.
8. Cylinder legs: Pl. IV: B 49; XXIX: C 187.
10. Lid knobs: Pl. XVIII: B 24.
13. Segmented flanges: Pl. XII: E 40.
14. Free animal's head: Pl. XI: B 42; XII: E 40; XV: B 167; XVI: B 22, B 41; XXI: B 36; XXIV: B 163; XXXI: C 139; E 18, B 9; XXXII: B 30.

15. T'ao-t'ie: Pl. X: B 32; XII: E 40; XVIII: B 24; XXII: B 31; XXXI: C 139; XXXII: B 25.
16. Common bird: Pl. IV: B 49; XVI: B 22; XVIII: B 24; XXIV: B 163; XXIX: C 187; XXXII: B 25.
19. Trunked dragon: Pl. XII: E 40; XVIII: B 24.
21. Feathered dragon: Pl. XXII: B 31; XXXII: B 30.
22. Snake: Pl. XII: E 40; XXXII: B 30.
23. Cicada: Pl. XVI: B 22, B 41.
24. Rising blade: Pl. X: B 32; XXI: B 36; XXXI: C 139; XXXII: B 25.
27. Animal triple band: Pl. X: B 32; XI: B 42; XXXI: E 18, B 9.
28. Scaled animal: Pl. XVIII: B 24; XXI: B 36.
29. Spiral filling: Pl. IV: B 49; X: B 32; XII: E 40; XVI: B 22, B 41; XXI: B 36; XXV: B 153; XXXII: B 30, B 25; XVIII: B 24.
30. Spirals on figures: Pl. XVIII: B 24.
32. Compound lozenges: Pl. XXX: B 7.
33. Interlocked T's: Pl. XVI: B 22.
34. Circle band: Pl. XXX: B 7.
35. Whorl circle: Pl. XV: B 167.
36. Vertical ribs: Pl. XV: B 167.
38. Square with crescents: Pl. XV: B 167.

The Yin-Chou style has added a few innovations:

39. »Bent ears«.

Ears (handles), which start, not vertically from the rim of the vessel but from a point an inch or two below the rim, run horizontally at first and then bend upwards. Pl. XVI: B 41; XXV: B 155, B 153.

40. »Hook projections«.

The flanges (cf. *13* above) broken up into hook-like projections. Pl. XVIII: B 24; XXII: B 31; XXXII: B 30, B 25.

41. »Tail-raising bird«.

A bird which, in contradistinction to the »common bird« of *16* above, has a plume-like tail raised vertically. Pl. XXI: B 36; XXIV: B 163; XXVII: C 67.

42. »P'an«.

The P'an type of vessel (round or oval tray, platter). Pl. XVI: B 41; XXV: B 155, B 153.

When passing in review the vessels of cat. B I here, we give no references to the books in which these vessels are to be found, as they were quoted on p. 30 ff. above, with the exception only of photographed vessels, which we think it useful to record here as well.

B 1. Ting. *1* square Ting; *8* cylinder legs; *35* whorl circle.
B 2. Ting. *39* bent ears.
B 3. Kuei. Photo Wuying 57. *29* spiral filling.
B 4. Hu. No distinctive features.
B 5. Ting. *8* cylinder legs; *16* common bird; *29* spiral filling.
B 6. Ting. *1* square Ting; *8* cylinder legs.
B 7. Kuei, lid. Our Pl. XXX. *32* compound lozenges; *34* circle band.
B 9. Kuei. Our Pl. XXXI. *14* free animal's head; *27* animal triple band.
B 10. Ting. *1* square Ting; *8* cylinder legs; *12* spikes.
B 12. Ting. Photo Paoyün 8. *2* Li-ting; *8* cylinder legs; *15* t'ao-t'ie; *18* vertical dragon; *26* leg blades; *29* spiral filling.
B 13. Kuei. Photo Eumorfopoulos I: 13. *29* spiral filling. Unusual decoration: elephants and on the foot dragons of an uncommon type.
B 14. Tsun. *4* Tsun; *16* common bird; *24* rising blades; *40* hook projections; *41* tail-raising bird.
B 15. Ho. Photo Senoku II: 101. No distinctive features.
B 16. Yi. *5* Yi; *10* lid knob; *13* segmented flanges; *15* t'ao-t'ie; *22* snake; *29* spiral filling; *37* T scores.
B 17. Ting. *8* cylinder legs; *13* segmented flanges; *15* t'ao-t'ie; *29* spiral filling; *30* spirals on figures; *37* T scores.
B 18. Yu. Photo Tahi t'ulu 167. *3* Yu.
B 21. Chung. *29* spiral filling (on top); at the same time Middle Chou elements: *43* Chung; *59* back to back dragons. The vessel seems to us very suspect.
B 22. Kuei. Photo Umehara I: 12, our Pl. XVI. Weill collection. *14* free animal's head; *16* common bird; *23* cicada; *29* spiral filling; *33* interlocked T's.
B 23. Yi. Photo Umehara I: 10. *5* Yi; *10* lid knob; *14* free animal's head (functioning at the same time as head of a cleft dragon); *15* t'ao-t'ie; *16* common bird; *19* trunked dragon; *28* scaled animal; *29* spiral filling; *30* spirals on figures.
B 24. Yi. Photo Umehara I: 11, our Pl. XVIII. Freer Gallery of Art. Same criteria as B 23.
B 25. Tsun. Our Pl. XXXII. *15* t'ao-t'ie; *16* common bird; *23* cicada made into *24* rising blades; *29* spiral filling; *40* hook projections.
B 26. Yu. *3* Yu; *14* free animal's head.
B 27. Kuei. No distinctive features.
B 30. Yu. Our Pl. XXXII. *3* Yu; *14* free animal's head; *21* feathered dragon (in an unusual variant); *22* snake; *40* hook projections.
B 31. Tsun. Photo Hakkaku 4, our Pl. XXII. *4* Tsun; *15* t'ao-t'ie; *21* feathered dragon; *24* rising blades; *29* spiral filling; *40* hook projections.
B 32. Ho. Our Pl. X. *15* t'ao-t'ie; *24* rising blades; *27* animal triple band; *29* spiral filling.
B 33. Ting. *1* square Ting; *8* cylinder legs; *12* spikes; *13* segmented flanges; *29* spiral filling; *35* whorl circle; *37* T scores.
B 34. Kuei. *29* spiral filling; *39* bent ears; for the rest too indistinctly drawn.
B 35. Yu. *3* Yu; *14* free animal's head; *28* scaled animal; *29* spiral filling; *41* tail-raising bird.
B 36. Tsun. Photo Hakkaku 9, our Pl. XXI. *4* Tsun; *14* free animal's head; *24* rising blades; *28* scaled animal; *29* spiral filling.
B 37. Kuei. Drawing bad and useless.
B 38. Kuei. *16* common bird; *29* spiral filling; *40* hook projections.
B 39. Ting. *1* square Ting; *8* cylinder legs; *16* common bird; *40* hook projections.

B 41. P'an. Photo Eumorfopoulos I: 47, our Pl. XVI. 14 free animal's head; 23 cicada; 29 spiral filling; 39 bent ears; 42 P'an.
B 42. Kuei. Photo Mengwei, Shang 25, our Pl. XI. 14 free animal's head; 27 animal triple band.
B 43. Yu. Photo Senoku II: 63. 3 Yu; 14 free animal's head; 16 common bird; 29 spiral filling.
B 44. Kuei. 14 free animal's head; 16 common bird; 29 spiral filling.
B 45. Kuei. 14 free animal's head.
B 47. Tsun. Drawing poor and useless.
B 48. Hien. Photo Senoku I: 12. 15 t'ao-t'ie.
B 49. Ting. Photo Mengwei, Sü 6, our Pl. IV. 8 cylinder legs; 16 common bird; 29 spiral filling.
B 50. Yu. 3 Yu; 14 free animal's head.
B 51. Yu. 3 Yu; 14 free animal's head; 16 common bird; 29 spiral filling.
B 52. Chï. 14 free animal's head; 27 animal triple band.
B 53. Kuei. Photo Senoku III: 105. 14 free animal's head; 16 common bird; 29 spiral filling.
B 55. Ting. 8 cylinder legs (so drawn in Ch'angan 1: 6); 16 common bird.
B 56. Ting. 8 cylinder legs.
B 57. Tsun. 4 Tsun; 29 spiral filling; 40 hook projections; 42 tail-raising bird. The drawing is very unfavourable, but the vessel probably authentic.
B 60. Ting. 8 cylinder legs; 13 segmented flanges; 16 common bird; 29 spiral filling; 37 T scores.
B 61. Yu. 3 Yu; 14 free animal's head; 16 common bird; 29 spiral filling; 42 tail-raising bird.
B 62. Ting. 1 square Ting (oblong); 26 leg blades.
B 64. Ting (oblong). 8 cylinder legs; 39 bent ears.
B 65. Ting. 8 cylinder legs; 27 animal triple band, so dissolved that it looks almost like a triple 31 spiral band.
B 66. Kuei. Photo Mengwei, Shang 33. 14 free animal's head; 35 whorl circle; 36 vertical ribs; 38 square with crescents. The stand has an admixture of Middle Chou: 58 broad figured band.
B 67. Ting. 1 square Ting; 8 cylinder legs; 12 spikes; 13 segmented flanges; 29 spiral filling; 32 compound lozenges; 35 whorl circle; 37 T scores.
B 68. Li. No distinctive features.
B 69. Yu. Seems suspect. A band of very realistically drawn deer.
B 70. Yu. 3 Yu; 14 free animal's head; 16 common bird; 29 spiral filling; 37 T scores; 42 tail-raising bird.
B 71. Ting. 8 cylinder legs; 16 common bird; 29 spiral filling.
B 73. Ting. Photo Shuangyü 7. 8 cylinder legs (yet with a slight tendency to 49 curved legs); 19 trunked dragon; 29 spiral filling.
B 74. Ting. Photo Senoku I: 2. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 29 spiral filling.
B 75. Ting. 8 cylinder legs.
B 76. Ting. 8 cylinder legs; 13 segmented flanges; 15 t'ao-t'ie; 29 spiral filling; 37 T scores.
B 77. Kuei. 14 free animal's head; 29 spiral filling.

So far we have treated only of vessels (cat. B I) which thanks to their inscriptions can be dated with a fair amount of certainty in the first half (1122—947) of Western Chou, what we can now call, from the point of view of art, the Yin-Chou period. The succeeding epoch, the second half (947—771) of Western

Chou (cat. B II) possessed, as we shall find presently, a totally different bronze art (»Middle Chou»). Now, besides the vessels of categories B I (1122—947) and B II (946—771), we have four other large categories: B III, C, D and E[1]) to all of which it is a common feature that a few of their vessels were contemporaneous with B I (1122—947), whereas the great majority of their vessels were contemporaneous with B II (946—771) or later (770—221). From the inscriptions alone it is not possible to pick out the early ones, those contemporaneous with cat. B I (1122—947); but since we have already determined just now, with the aid of cat. B I (vessels 1—77), what elements were characteristic of that period — Yin criteria 1—38 with the addition of criteria 39-42 — we can now take the stylistic facts into our service and from categories B III, C, D and E single out those vessels which agree in style with the Yin-Chou period vessels (B 1—77) and which must therefore reasonably date from the first two centuries of the Chou dynasty. We thus obtain an additional list of Yin-Chou vessels (drawn from categories B III, C, D and E), determined as belonging to the Chou dynasty from their inscriptions, but attributed more precisely to the period 1122—947 from their style, as a result of a comparison with the vessels B I above.

Royal Court:

B 153. P'an. Our Pl. XXV. 29 spiral filling; 39 bent ears; 42 P'an.
B 154. Tsun. 4 Tsun; 14 free animal's head; 29 spiral filling. Poor drawing.
B 155. P'an. Our Pl. XXV. 29 spiral filling; 39 bent ears; 42 P'an.
B 156. Tsun. 4 Tsun; 16 common bird; 29 spiral filling (? poor drawing).
B 160. Kuei. 14 free animal's head; 29 spiral filling; 41 tail-raising bird.
B 161. Yu. 3 Yu; 14 free animal's head; 16 common bird; 29 spiral filling; 31 spiral band; 41 tail-raising bird.
B 162. Hien. Photo Senoku I: 14. 15 t'ao-t'ie; 29 spiral filling.
B 163. Yu. Photo Senoku II: 67, our Pl. XXIV. 3 Yu; 14 free animal's head; 16 common bird; 29 spiral filling; 41 tail-raising bird.
B 164. Tsun. 4 Tsun; 14 free animal's head; 15 common bird; 24 rising blades; 29 spiral filling; 41 tail-raising bird.
B 166. Kuei. 14 free animal's head; 29 spiral filling; 41 tail-raising bird.
B 167. Kuei. Photo Tch'ou XII, our Pl. XV. 14 free animal's head; 35 whorl circle; 36 vertical ribs; 38 square with crescents.
B 168. Ting. 8 cylinder legs; 16 common bird; 29 spiral filling.

Cheng:

C 12. Kuei. 14 free animal's head; 15 t'ao-t'ie. Poor drawing.

Chou:

C 20. Yu. 3 Yu; 14 free animal's head; 29 spiral filling.
C 21. P'an. Photo Paoyün 79. 39 bent ears; 42 P'an; impossible to tell whether Yin-Chou or Middle Chou.

[1]) B III is Western Chou (1122—771) generally, without any possibility of a definite attribution to its 1st or its 2nd half; C is the Feudal Court section; D is the Chou Clan names section; E is the X-fu names section.

C 23. Hu. 29 spiral filling; 41 tail-raising bird.
C 25 a. Li. Photo Shïerkia 3: 3. Vessel of the early Li type.

Jo:

C 49. Hien. The drawing Shan 3: 36 gives the impression that this is a recent imitation of the archaic type.
C 50. Ting. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; 29 spiral filling; 31 spiral band.

Ki:

C 67. Kuei lid. MFEA. Our Pl. XXVII. 28 scaled animal (a few scales on the bird); 29 spiral filling; 41 tail-raising bird.

Kuo:

C 78. Kuei. 14 free animal's head; 29 spiral filling; 31 spiral band; very poor drawing.

Man:

C 100. Ting. Photo Mengwei, Shang 9. 1 square Ting; 8 cylinder legs; 13 segmented flanges; 20 winged dragon; 26 leg blades; 29 spiral filling; 37 T scores.
C 101. Kuei. Photo Mengwei, Shang 22. 16 common bird; 29 spiral filling.

Pei:

C 106. Yu. Photo Umehara I: 77, Museum of Fine Arts, Boston. 3 Yu; 14 free animal's head; 29 spiral filling; 34 circle band; dragon somewhat kindred to 21.

Shao:

C 110. Hien. Photo Senoku I: 11. 15 t'ao-t'ie; 21 feathered dragon; 29 spiral filling.
C 111. Tsüe. 6 Tsüe; 27 animal triple band.

T'eng:

C 138. Kuei. Photo Mengwei Shang 27. 14 free animal's head; 29 spiral filling; 41 tail-raising bird.

Ts'ai:

C 139. Tsun. Our Pl. XXXI. 4 Tsun; 14 free animal's head; 15 t'ao-t'ie; 24 rising blades; 29 spiral filling.

Ts'i:

C 157. P'an. 14 free animal's head; 17 gaping dragon; 29 spiral filling.

Wei:

C 178. Kuei. 29 spiral filling; 35 whorl circle; drawing very bad.

Ying:

C 187. Ting (oblong), our Pl. XXIX. 8 cylinder legs; 16 common bird.
C 188. Kuei. Too badly drawn to be of any use.
C 189. Kuei. No distinctive features.
C 190. Yu. 3 Yu; 14 free animal's head; 29 spiral filling; 32 compound lozenges. Poor drawing.

Yung:

C 192. Ting. Photo Mengwei, Shang 10. 9 supporting animals; 13 segmented flanges; 15 t'ao-t'ie; 30 spirals on figures.

Chou clan names:

D 13. Kuei. 14 free animal's head; 27 animal triple band; 35 T scores.
D 34. Chï. Photo Shuangkien 49. 14 free animal's head.
D 37 a. Ting. 8 cylinder legs.
D 44. Kuei. 14 free animal's head; 27 animal triple band; 36 vertical ribs.
D 54. Kuei. 14 free animal's head; 39 bent ears.
D 60. Tou. 14 free animal's head; poor drawing.
D 61. Ting. Photo Senoku I: 3. 2 Li-ting; 8 cylinder legs; 15 t'ao-t'ie; dragon kindred to 17 gaping dragon; 29 spiral filling.
D 69. Kuei. 14 free animal's head; 29 spiral filling.
D 71. Yu. 3 Yu; 14 free animal's head.

X-fu names:

E 1. Ting. Drawing bad and useless.
E 2. Ho. Drawing bad and useless.
E 3. Yu. 3 Yu; 14 free animal's head; 16 common bird; 29 spiral filling.
E 4. Kuei. 29 spiral filling(?); 39 bent ears; poor drawing.
E 7. Ting. 8 cylinder legs; 27 animal triple band.
E 18. Kuei. Our Pl. XXXI. 14 free animal's head; 27 animal triple band.
E 22. Kia. Photo Senoku II: 88. 6 Kia; 15 t'ao-t'ie; 18 vertical dragon; 28 scaled animal; 29 spiral filling; 30 spirals on figures.
E 24. Tsun. 4 Tsun; 16 common bird; 29 spiral filling.
E 25. Yu. Photo Umehara I: 78, Oppenheim collection. 3 Yu; 14 free animal's head; 16 common bird; 20 winged dragon (? indistinct); 29 spiral filling.
E 29. Hu. 21 feathered dragon (strongly disfigured); 29 spiral filling; the vessel seems suspect, but this may be due to bad drawing.
E 36. Ho. 16 common bird; 29 spiral filling.
E 37. Kuei. Drawing bad and useless.
E 38. Kuei. 14 free animal's head; 16 common bird.
E 39. Ting. Drawing indistinct.
E 40. Kuei. Our Pl. XII. Oeder collection. 14 free animal's head; 15 t'ao-t'ie; 19 trunked dragon; 22 snake; 29 spiral filling.
E 46. Tsun. 4 Tsun; 15 t'ao-t'ie; 29 spiral filling. Seems suspect, but this may be due to bad drawing.
E 48. Kuei. 14 free animal's head; 16 common bird; 29 spiral filling; 36 vertical ribs.
E 49. Kuei. Photo Sungchai 9. 14 free animal's head; 15 t'ao-t'ie; 19 trunked dragon; 27 animal triple band; 29 spiral filling; 35 whorl circle.
E 54. Hien. Drawing bad and useless.
E 60. Kuei. Drawing bad and useless.
E 61. Kuei. 15 t'ao-t'ie; 39 bent ears. Poor drawing.
E 63. Yu. 3 Yu; 14 free animal's head; 21 feathered dragon; 29 spiral filling; poor drawing.
E 65. Tsun. Photo Mengwei, Sü 24. 4 Tsun; 14 free animal's head.
E 66. Kuei. 14 free animal's head; 27 animal band (unusual: here in 4 sections).
E 67. Tsun. 4 Tsun; 14 free animal's head; 21 feathered dragon; 29 spiral filling.

E 68. Yu. *3* Yu; *14* free animal's head. The drawing in Sükia is bad and useless, but the picture postcard of the Palace Museum shows the vessel to be quite good.
E 74. Ting. Drawing bad and useless.
E 76. Ting. *9* supporting animals; *15* t'ao-t'ie made of *27* animal triple bands.

After the reduction, on the one hand of 19 cases (B 4, 15, 27, 37, 47, 68, 69; C 49, 188, 189; E 1, 2, 29, 37, 39, 46, 54, 60, 74), which are either bad vessels or bad pictures or indifferent vessels, on the other hand of two cases (B 21, 66) in which there is an admixture of Middle Chou elements (spurious vessels?), we obtain a material of 116 clear Yin-Chou vessels, presenting the criteria 1—42.

THE MIDDLE CHOU STYLE.

On p. 39 ff. above we have recorded 56 illustrated vessels which from their inscriptions can be dated in the second half (946—771, orthodox chronology) of Western Chou. The style of these vessels, what we call the Middle Chou style, marks a sudden, complete and fundamental change in the art traditions in China. It is characterized on the one hand by a ruthless abolition of the whole array of Yin elements recorded in criteria 1—38 above[1]; on the other hand by the introduction of a series of new elements, most of which were entirely unknown in China before that time, and some of which had cropped up but sporadically, in exceptional cases, anterior to 947:

43. »Chung».

The Chung bell. The term Chung has often been misused by Western writers. There were bells in Yin time (see e. g. the Nao Pl. XXVIII: A 178), but not the proper Chung bell. In the Yin-Chou period we know of only one example (see B 21 above), which therefore seems doubtful. The real fortunes of the Chung start with Middle Chou. Pl. XLVII: C 73, B 94; XLVIII: C 66, C 34; LI: C 34, B 96.

44. »Arched Li».

The original Li of Yin time, which derives from the prehistoric Li, made up of three pointed-bottomed vessels joined into one, still retains much of the »udder»-like appearance of that clumsy vessel: the three cavities, going down into the legs, are somewhat sack-shaped, see Pl. V: A 196. The new Li of the Middle Chou style is an elegant vessel. The sackshape has disappeared, and the line from one leg to another is a finely arched curve. Pl. XXXVI: C 107; XXXVII: D 25, C 8; L: C 55, C 133, D 38.

45. »Fu».

The Fu tray. Pl. XLII: C 1; XLIII: D 5, D 9; L: C 95, B 119.

[1]) On the contrary, the Yin-Chou innovations 39—42 live on in middle Chou, e. g.: *39.* »Bent ears»: Pl. XXXIV: C 64; XXXV: E 42; XLIV: D 12, C 40; XLIX: C 143, C 14. *42.* »P'an»: XLIV: D 12, C 40; LI: C 194.

46. »Ih».

The Ih »sauce-boat» vessel (by the arbitrarily chosen spelling Ih we distinguish it from the vessel Yi of *5* above). It should be strictly distinguished from the Kuang (*7* above). Pl. XLV: B 120, C 39.

47. »Sü».

The oval vessel corresponding to the round Kuei. Pl. XXXVIII: B 90.

48. »Shallow Ting».

The old Ting was strictly hemispherical. Here we have a Ting which is so to speak a smaller section of a sphere, a shallow Ting widening towards the rim. Pl. XXXIII: C 121; XXXV: E 42; XXXVI: C 4.

49. »Curved legs».

This denomination is very far from being exhaustive. The essential point is that the Ting legs in their exterior line from top to bottom do not go in a straight line — as in the cylinder legs of *8* above — but make more or less of an S-curve. This is effected on the one hand by their having a bulbous upper part, on the other hand by their expanding at the foot. There are many varieties: some of them are strongly bulbous above and expanding only very little or not at all at the bottom, others *vice versa*. Another general feature is that the legs are cut straight and flat on the inside. Pl. XXXIII: B 143, C 121; XXXIV: B 142, C 64; XXXV: B 116, E 42; XXXVI: C 4; XLIX: B 88, B 114, C 143, C 173.

50. »Fin flanges».

These occur exclusively on the Li tripods. The flanges are of a quite different type from those studied earlier (*13* above). They are very thin, and higher in their middle part, so that they assume the shape of a fin. Pl. XXXVI: C 107; XXXVII: D 25; L: C 55, C 133.

51. »Footed Kuei».

These Kuei vessels stand on small feet of varying shapes. The foot may take the shape of an animal's head, or an animal's head is attached to the top of the foot. In some cases merely the place where there should be one of these diminutive feet is marked by an animal's head, and the foot itself is discarded. For the sake of convenience we reckon this rudimentary foot as belonging to our criterion *51*. Pl. XXXVIII: C 80; XXXIX: D 28, C 103; XL: B 132, D 4.

52. »Spiral horns».

These are the spiral horns on the animal's heads forming the handles. Pl. XXXV: E 32; XXXVIII: B 90; XL: B 132; XLV: B 120.

53. »Grooves».

By this short denomination we indicate the horizontal grooves or furrows, the godrooned rings seen in Pl. XXXVIII: C 80, B 90; XXXIX: D 28; XL: B 132, D 4; XLI: B 133, B 89; XLV: B 120, C 39.

54. »Vertical stripes».

These, like the »fin flanges» of *50* above, are to be found exclusively on the Li tripods. They must be clearly distinguished from the vertical ribs of 36 above. There we had to do with convex or flattened, fairly broad ribs applied to the surface, leaving but very narrow gaps between them. Here we have very thin raised lines, leaving the bottom surface as the principal part, with but thin vertical flutings. The difference can be illustrated by this sectional drawing: Pl. XXXVI: C 107; XXXVII: D 25; L: D 38.

55. »Scale band».

The scales of *28* above were simple, fairly realistic scales on the bodies of animals, mostly on dragons or snakes, but occasionally also on birds, elephants, owls and so on. Here, in *55* and *56*, the scale motif reverts but is applied in a particular and quite new fashion. A band, mostly a horizontal band round the neck, less often round the base, sometimes also a curved band on the handle, is filled with scales running length-wise, the convex top of one scale fitting more or less tightly into the concave base of the preceding one. The scales are of varying shapes, often very long drawn-out, frequently occurring in alternating shapes, one long and one short. The pattern inside likewise varies, being composed of double lines or other fillings. Pl. XXXIII: B 143; XXXV: E 32; XXXVI: C 4, C 107; XXXIX: D 28; XL: B 132; XLIII: D 5; XLIV: D 12; XLV: C 39; XLVII: C 73, B 94; XLVIII: C 66; XLIX: C 143, B 114, E 55; L: D 38, C 95, B 119; LI: D 49.

56. »Vertical scales».

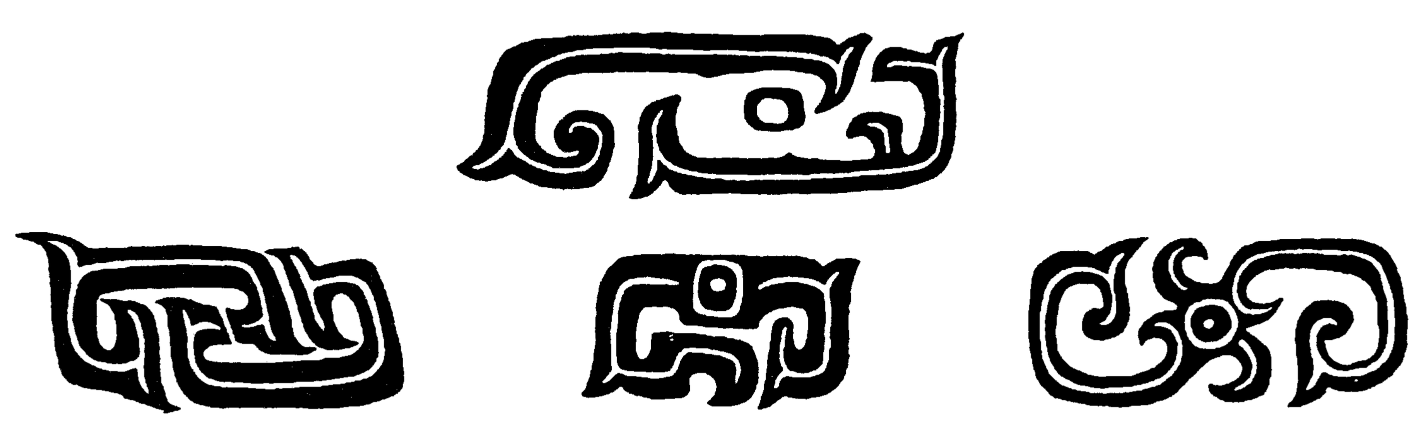
The same varying types of scales as in *55* can be applied in a way which gives a totally different impression. They are either hung in circles round the body, one row below the other, thus filling the surface, with the convex end downwards; or they adorn the base: a circle of vertically hanging scales, also with the convex end pointing downwards; or they form a band with the convex end pointing upwards. In the last variety they are sometimes a little reminiscent of the »rising blades» of *24* above, but there is always a clear distinction and no confusion is possible. On some vessels a circle of upward-pointing vertical scales forming the rim give an impression of a kind of crown. Pl. XXXIV: B 142, C 64; XXXV: C 140; XXXVIII: C 80; XXXIX: C 103; XL: D 4; XLII: C 166; XLIV: C 40; XLVI: B 118, C 83; XLIX: C 143; LI: D 49.

57. »Wavy line».

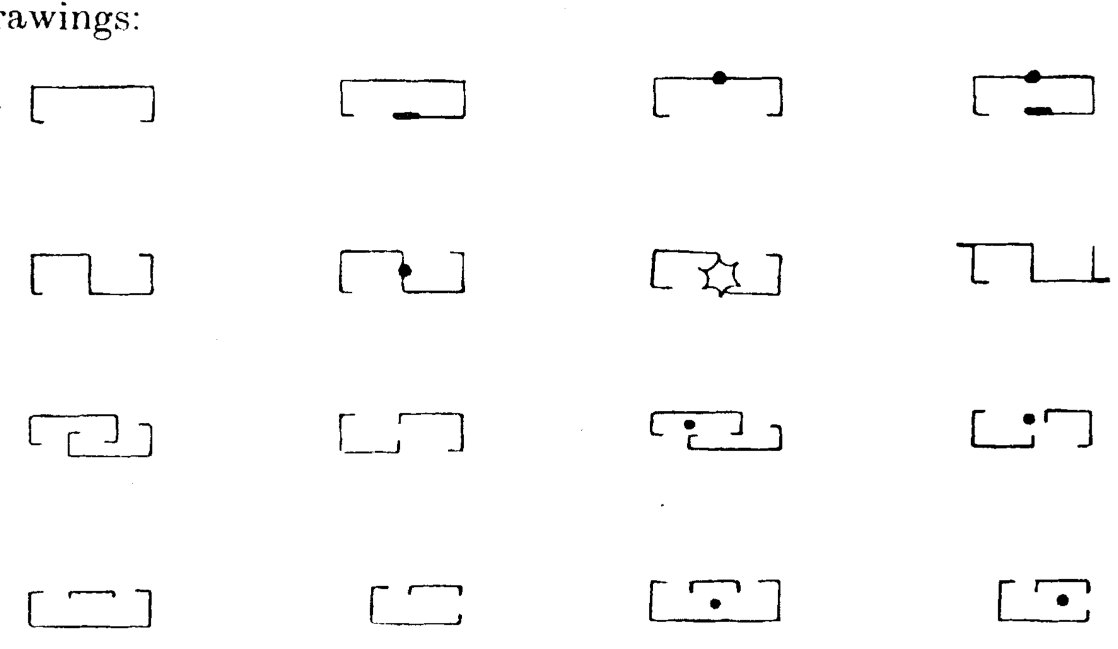
This is a large meander line running all round the body, either at the rim or at the belly or at the base. It may be a simple line or a broad band; a simple meander movement or one broken in various ways, e. g. Pl. XXXV: C 140; XLII: C 166; XLIII: D 5; XLIV: D 12; XLVI: B 118; XLVII: B 94; XLVIII: C 66; XLIX: B 88, B 114, C 173, E 55; L: B 119, E 56, LI: C 193.

58. »Broad figured band».

This not very expressive term sums up a long series of varieties of one of the most important decorative motifs of the Middle Chou style. A broad band, mostly round the neck, but sometimes also differently placed, is filled with certain conventionalized figures (some of them very likely derived from animal figures), repeated all alike all round the body:



They are C- or S-shaped flourishes and such-like figures in various combinations and varieties, and they are always carried out in broad band-like lines, vigorous and large. Some of them, the simple C and S, are exactly the C and S of the Yin style (*29* above) in their variants »drawn out in points», but distinguished from a proper Yin pattern by their disposition: prone in a regular band. The figures of this element *58* vary infinitely in the details of their execution, but they can generally be reduced in principle to 16 figures indicated in the following skeleton drawings:



Some examples of the most common of these figures are given here: Pl. XXXIV B 142, C 64; XXXV: E 42, C 140; XXXVIII: B 90, C 80; XXXIX: C 103; XL: D 4; XLI: B 133; XLII: C 1; XLIV: C 40; XLV: B 120, C 39; XLVI: B 118, C 83; XLVII: B 94; XLVIII: C 66, C 34; XLIX: B 114, B 88, C 14, C 143; L: C 133, E 56, B 119; LI: B 96, C 194, C 144, C 193, C 34.

59. »Back-to-back dragons».

This element is not entirely unheard-of in earlier periods — the Tsun A 108 has it in a subordinate place as a filling at the side of a dominating t'ao-t'ie. But in Middle Chou this motif is placed as the central and dominating group of a décor. Pl. XXXVII: C 8; XLIII: D 9; XLVI: B 118; XLVII: C 73, B 94; L: C 55; LI: B 96 (altered).

We now pass in review the vessels of cat. B II (second half of Western Chou, 946—771) on the basis of their criteria.

B 78. Ting. *8* cylinder legs; this vessel is still in the old Yin-Chou style.
B 79. Kuei. *53* grooves; *58* broad figured band.
B 80. Kuei. *55* scale band; *57* wavy line; *58* broad figured band; apparently also a *14* free animal's head, though the drawing is indistinct.
B 81. Kuei. *51* footed Kuei; *53* grooves.
B 87. Ting. *57* wavy line; *58* broad figured band.
B 88. Ting, our Pl. XLIX. *49* curved legs, *57* wavy line; *58* broad figured band.
B 89. Kuei. Photo Mengwei, Shang 31, our Pl. XLI. *53* grooves.
B 90. Sü. Photo Umehara II: 122, our Pl. XXXVIII. Buckingham collection. *47* Sü; *52* spiral horns; *53* grooves; *58* broad figured band.
B 91. Sü. *47* Sü; *53* grooves; *55* scale band.
B 92. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
B 93. Ting. *49* curved legs; *55* scale band.
B 94. Chung. Photo Senoku Betsu 9, our Pl. XLVII. *43* Chung; *55* scale band; *57* wavy line; *58* broad figured band; *59* back to back dragons.
B 95. P'an. *39* bent ears; *42* P'an; a highly dissolved *15* t'ao-t'ie; thus this vessel is in Yin-Chou style rather than in Middle Chou style.
B 96. Chung. Our Pl. LI. *58* broad figured band. Below, the *59* back to back dragons have been altered so as to become parts in two birds facing each other.
B 98. Kuei. Photo Tch'ou X, XI. This vessel is very unusual both in shape and décor. As far as we can judge from the illustration, there are some reminiscences of the t'ao-t'ie, but the relief is the flat one typical of Middle Chou.
B 99. Kuei. *41* tail-raising bird; *57* wavy line; *58* broad figured band. The drawing is poor.
B 100. Chung. Photo Senoku Betsu 1. *43* Chung; *58* broad figured band; *59* back to back dragons.
B 101. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.
B 102. Kuei. *51* footed Kuei; *53* grooves; *55* scale band; *58* broad figured band.
B 103. Hu, lid. *58* broad figured band.
B 106. Kuei. *51* feeted Kuei; *53* grooves; *57* wavy line; *58* broad figured band; a *31* spiral band is probably due to bad drawing.

B 107. P'an. *42* P'an; *57* wavy line; *58* broad figured band.
B 108. Fu. *45* Fu; *56* vertical scales; *58* broad figured band; *59* back to back dragons (very dissolved).
B 109. Ting. *39* bent ears; *41* tail-raising bird; *49* curved legs; *58* broad figured band.
B 110. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band.
B 114. Ting. Our Pl. XLIX. *49* curved legs; *55* scale band; *57* wavy line; *58* broad figured band.
B 115. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
B 116. Ting. Our Pl. XXXV. *49* curved legs.
B 117. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
B 118. Photo Wuying 87, our Pl. XLVI. *56* vertical scales; *57* wavy line; *58* broad figured band; *59* back to back dragons.
B 119. Fu. Our Pl. L. *45* Fu; *55* scale band; *57* wavy line; *58* broad figured band.
B 120. Ih. Photo Shuangkien 21, our Pl. XLV. *46* Ih; *52* spiral horns; *53* grooves; *58* broad figured band.
B 122. Ting. *49* curved legs; *58* broad figured band.
B 123. Chung. Photo Shuangyü 3. This bell, which has *22* snake and *29* spiral filling in the revived Huai fashion (see Summary below), and the *68* spiral boss of Huai, seems very suspect: it is the only Huai style vessel of the whole group B II; is the inscription added later?
B 124. Chung. Photo Senoku Betsu 10. *43* Chung; at the bottom big C-shaped figures, back to back, much reminding of the fillings of certain *58* broad figured bands; to the right of them a bird.
B 125. Chung. Photo Senoku Betsu 2. *43* Chung; very similar to the preceding; to the right of the bottom figures a *35* whorl circle — an archaizing feature?
B 126. Kuei, lid. No distinctive features.
B 129. Kuei. Drawing bad and useless.
B 130. Kuei, lid. *41* tail-raising bird; *29* spiral filling; Yin-Chou, not Middle Chou style; this confirms our doubts expressed on p. 47 above about the placing of this inscription.
B 131. Ting. *49* curved legs; *57* wavy line; *58* broad figured band; at the same time there is *29* spiral filling, which — if we can rely on the drawing in this Sung time catalogue — forms a reminiscence of the Yin-Chou style.
B 132. Kuei. Photo Wuying 75, our Pl. XL. *51* footed Kuei; *52* spiral horns; *53* grooves; *55* scale band.
B 133. Photo Mengwei, Shang 34, our Pl. XLI. *53* grooves; *58* broad figured band.
B 134. Kuei. *51* footed Kuei; *53* grooves; *55* scale band; *58* broad figured band.
B 137. Kuei. *51* footed Kuei; *53* grooves; *55* scale band; *56* vertical scales; *58* broad figured band.
B 138. Ting. *49* curved legs.
B 139. Kuei. *51* footed Kuei; *52* spiral horns; *53* grooves; *55* scale band.
B 140. Li. *44* arched Li; *49* curved legs; *50* fin flanges; *54* vertical stripes.
B 142. Ting. Our Pl. XXXIV. *49* curved legs; *56* vertical scales; *58* broad figured band.
B 143. Ting. Our Pl. XXXIII. *49* curved legs; *55* scale band.
B 144. P'an. *39* bent ears; *55* scale band; *57* wavy line.
B 145. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
B 146. Sü. *47* Sü; *53* grooves; yet at the same time a band of strongly stylized *23* cicadas.
B 149. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band (figures very dissolved).

B 150. Kuei. *51* footed Kuei; *53* grooves.
B 151. Kuei. *51* footed Kuei; *53* grooves.
B 152. Sü, lid. *58* broad figured band.

So far we have dealt only with vessels (cat. B II) which from their inscriptions can be dated with a high degree of probability in the period 946—771 B. C. Now there are four other main categories: B III, C, D and E[1]), in which the great majority of the vessels[2]) are either contemporaneous with B II (946—771) or later (770—221 B. C.). Out of these, a minor portion belong to the Huai style (see below); the bulk of them are of exactly the same type as the vessels of cat. B II, i. e. Middle Chou, and we thus have to give a long additional list, drawn from categories B III, C, D and E, of Middle Chou vessels:

Royal Court (Cat. B III):

B 169. Sü. *47* Sü; *53* grooves; *55* scale band; yet *14* free animal's head, which is an admixture of Yin-Chou, if it is not simply an erroneous drawing in this Sung catalogue.
B 170. Fu. *45* Fu; *55* scale band; *58* broad figured band; *59* back to back dragons.
B 171. Kuei. *51* footed Kuei; *53* grooves.
B 172. Kuei. *53* grooves.
B 173. Kuei, lid. *53* grooves.
B 175. Hu. *52* spiral horns; *57* wavy line.
B 176. Ting. *49* curved legs.
B 177. Kuei, lid. *53* grooves; yet *16* common bird.
B 178. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band.
B 179. Kuei. *51* footed Kuei; *58* broad figured band (very dissolved); poor drawing.
B 180. Ting. *49* curved legs; *58* broad figured band.
B 181. Ting. *49* curved legs; *57* wavy line; *58* broad figured band.
B 182. Kuei, lid. *58* broad figured band; *59* back to back dragons; a slight tendency to *29* spiral filling in some places.

Feudal states:

Ch'en:

C 1. Fu. Photo Mengwei, Sü 15. Our Pl. XLII. *45* Fu; *58* broad figured band.
C 3. Kuei. *57* wavy line; at the same time *14* free animal's head; therefore mixed style; but the drawing is too poor to be of real use.
C 4. Ting. Photo Wuying 26, our Pl. XXXVI. *48* shallow Ting; *49* curved legs; *55* scale band.

Cheng:

C 6. Fu. *45* Fu; the drawing is too poor to be of any use; a picture postcard from the Palace Museum seems to indicate a good vessel, but does not show the details.
C 6 a. Li. Photo Shïerkia 12: 8. *44* arched Li; *55* scale band.
C 7. Kuei. *56* vertical scales; *57* wavy line; *58* broad figured band; (is there a *14* free animal's head? drawing indistinct).

[1]) See p. 113 above, note.
[2]) A few of them were earlier, C 12—E 76, pp. 113—116 above.

C 8. Li. Photo Mengwei, Shang 16, our Pl. XXXVII. *44* arched Li; *59* back to back dragons.
C 9. Kuei. Photo Wuying 81. *51* footed Kuei; *53* grooves; *55* scale band.
C 10. Ih. *46* Ih; *53* grooves; *55* scale band.
C 11. Sü, lid. Photo Mengwei, Shang 17. *53* grooves.
C 14. Hien. Our Pl. XLIX. *39* bent ears; *58* broad figured band.
C 15. Li. *44* arched Li; *59* back to back dragons (? very poor drawing).
C 16. Hu. *57* wavy line; *58* broad figured band; admixture of Huai elements: *29* spiral filling (revived); *66* warts.
C 17. Ting. *49* curved legs; *58* broad figured band; admixture of Huai: the figures of *58* have been adorned with small dragon heads at the ends, making a crowded *61* interlacery impression. The drawing is poor and probably does no justice to the vessel.

Ch'i:

C 18. Ting. *49* curved legs; *58* broad figured band.
C 19. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band.

Chu[4]:

C 27. Fu. *45* Fu; *58* broad figured band; *59* back to back dragons.
C 27 a. Fu. Photo Shïerkia 6: 9. *45* Fu; *58* broad figured band; *59* back to back dragons.

Ch'u:

C 28. Chung. Picture Mengwei, Shang 2. The analysis of this bell is very difficult; we leave the question open.
C 34. Chung series. Photo Senoku Betsu 5—7, our Pl. XLVIII; drawing T'ao 1: 17, our Pl. LI. *43* Chung; *58* broad figured band. A Chung with the same inscription see Huai below.
C 39. Ih. Our Pl. XLV, Sedgwick collection. *46* Ih; *53* grooves; *55* scale band; *58* broad figured band; incipient Huai, in so far as the figures of the band are worked out with small bird's heads (61).
C 40. P'an. Our Pl. XLIV, Sedgwick collection. *39* bent ears; *42* P'an; *56* vertical scales; *58* broad figured band.

Han[1]:

C 42. Ting. *49* curved legs; *55* scale band.

Hi:

C 43. Li. Photo Senoku I: 8. *44* arched Li; *50* fin flanges; *54* vertical stripes; *55* scale band.

Huang:

C 44. Ting. Photo Paoyün 23. *49* curved legs; *55* scale band; possibly a very dissolved *15* t'ao-t'ie (photo indistinct).

Juei:

C 51. Chung. *43* Chung; *58* broad figured band; *59* back to back dragons.
C 52. Chung. *43* Chung; *58* broad figured band; *59* back to back dragons.
C 53. Ting. *49* curved legs; *57* wavy line; *58* broad figured band.

C 54. Ting. *49* curved legs; *57* wavy line; *58* broad figured band.
C 55. Li. Our Pl. L. *44* arched Li; *50* fin flanges; *58* broad figured band; *59* back to back dragons.
C 56. Kuei. *51* footed Kuei; *52* spiral horns; *53* grooves; *56* vertical scales; *58* broad figured band.
C 57. Hu. *56* vertical scales; *57* wavy line; *58* broad figured band; *59* back to back dragons.
C 58. Fu. *45* Fu; *55* scale band; *58* broad figured band; *59* back to back dragons.
C 59. Hu. Photo Shū-Kan ihō 15. *57* wavy line.
C 60. Ting. *39* bent ears; *49* curved legs; *56* vertical scales; *58* broad figured band.
C 61. Hu. Photo Wuying 102. *41* tail-raising bird; *56* vertical scales; *58* broad figured band; *59* back to back dragons.
C 62. Hu. *56* vertical scales; *57* wavy line; for the rest indistinct.
C 63. Fu. *45* Fu; *55* scale band; *59* back to back dragons.
C 64. Ting. Photo Shuangkien 8, our Pl. XXXIV. *39* bent ears; *49* curved legs; *56* vertical scales; *58* broad figures band. A slight tendency towards Huai because of the somewhat squat shape (*60*).

Kao:
C 65. Ting. *49* curved legs; *58* broad figured band (in a very dissolved variant).

Ki:
C 66. Chung. Photo Senoku Betsu 4, our Pl. XLVIII. *43* Chung; *55* scale band; *57* wavy line; *58* broad figured band.

K'i:
C 68. Ting. *39* bent ears; *49* curved legs; *56* vertical scales; *58* broad figured band.
C 69. Hu. Photo Ishu 23. *58* broad figured band (strongly dissolved).
C 70. Kuei. Photo Shïerkia 5: 16; *51* footed Kuei; *52* spiral horns; *53* grooves; *58* broad figured band.
C 73. Chung. Photo Mengwei, Sü 1, our Pl. XLVII. *43* Chung; *55* scale band; *59* back to back dragons.

Kuo:
C 74. Ting. Photo Mengwei, Shang 13. *49* curved legs; *57* wavy line; *58* broad figured band.
C 76. Li. *44* arched Li; *59* back to back dragons.
C 77. Kuei. *39* bent ears; *51* footed Kuei.
C 79. Li. *44* arched Li; *54* vertical stripes.
C 79 a. Li. Photo Shïerkia 7: 9. *44* arched Li; *50* fin flanges; *54* vertical stripes; *55* scale band.
C 80. Kuei. Our Pl. XXXVIII, Victoria and Albert Museum (the lid is of wood). *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
C 81. Hu. *56* vertical scales; *58* broad figured band.
C 82. P'an. Photo Shuangyü 12. *39* bent ears; *42* P'an; photo for the rest too indistinct.
C 83. Hu. Shuangyü 17, our Pl. XLVI. *56* vertical scales; *58* broad figured band.

Lu:
C 84. Chung. *43* Chung; *57* wavy line (on handle); the back to back dragons *59* have been altered into some weird birds.

C 86. Sü. *47* Sü; *53* grooves; *58* broad figured band.
C 87. Ting. *49* curved legs; *58* broad figured band.
C 88. Fu. *45* Fu; *58* broad figured band; incipient Huai: *61* interlacery (small crowded dragons with narrow bands crossing the bodies).
C 92. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
C 94. P'an. *39* bent ears; *42* P'an; *58* broad figured band.
C 95. Fu. Our Pl. L. *45* Fu; *55* scale band; *59* back to back dragons.
C 96. Kuei. Photo Paoyün 64. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
C 97. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band; Yin-Chou admixture; *14* free animal's head.

Man:
C 102. Sü. *47* Sü; *52* spiral horns; *53* grooves; *55* scale band.

Mao:
C 103. Kuei. Photo Paoyün 72, our Pl. XXXIX. *51* footed Kuei; *56* vertical scales; *58* broad figured band.

Mei:
C 104. Ting. *49* curved legs; *55* scale band.
C 105. Ting. *49* curved legs; *55* scale band.

Pi:
C 107. Li. MFEA, our Pl. XXXVI. *44* arched Li; *50* fin flanges; *54* vertical stripes; *55* scale band.

P'o:
C 108. Li. *44* arched Li; *50* fin flanges; *58* broad figured band (strongly dissolved).
C 109. Ting. *49* curved legs; *56* vertical scales; *58* broad figured band.

Shao:
C 113. Li. *44* arched Li; *50* fin flanges; *54* vertical stripes; *55* scale band.

Shï:
C 115. Ting. Photo Paoyün 25. *39* bent ears; *49* curved legs; *58* broad figured band.
C 116. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band.

Sie:
C 117. P'an. *39* bent ears; *42* P'an; *56* vertical scales; *58* broad figured band.

Su:
C 118. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.
C 119. Kuei. Photo Paoyün 66. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
C 121. Ting. Photo Mengwei, Shang 11, our Pl. XXXIII. *48* shallow Ting; *49* curved legs; the filling of the band cannot be seen from the photograph.
C 123. Ting. *49* curved legs.

Tan:
C 133. Li. Our Pl. L. *44* arched Li; *50* fin flanges; *59* back to back dragons.
C 134. P'an. Photo Shuangyü 13, too indistinct.

Teng:
C 135. Kuei, lid. Photo Mengwei, Sü 21. *53* grooves; possibly *58* broad figured band (photo indistinct).
C 136. Ting. Photo Mengwei, Shang 12. *49* curved legs; *55* scale band.
C 137. Hu, lid. *58* broad figured band.

Tseng:
C 140. Hu. Our Pl. XXXV. *56* vertical scales; *57* wavy line; *58* broad figured band.
C 141. Fu. *45* Fu; *56* vertical scales; *57* wavy line; *58* broad figured band; incipient Huai: tendency to *61* interlacery.
C 143. Ting. Our Pl. XLIX. *39* bent ears; *49* curved legs; *55* scale band; *56* vertical scales; *58* broad figured band. Also photo Shuangyü 9.
C 144. P'en. Our Pl. LI. *58* broad figured band. Photo Shuangyü 15, very indistinct.

Ts'i:
C 146. P'an. No distinctive features.
C 148. Ih. No distinctive features.
C 153. P'an. *39* bent ears; *42* P'an; *58* broad figured band; in the latter there is apparently a tendency towards Huai (*61* interlacery, *68* spiral circle), but the drawing is so bad that nothing can be built on it.
C 154. Ih. *46* Ih; *52* spiral horns; *53* grooves.
C 155. Hu. *55* scale band; *57* wavy line.
C 156. Hu. No distinctive features.
C 160. Chung. *43* Chung; below, figures such as occur in *58*; poor drawing.
C 163. Ting. *49* curved legs; *55* scale band.
C 164. Li. *44* arched Li; *59* back to back dragons.
C 166. Kuei. Photo Paoyün 74, our Pl. XLII. *56* vertical scales; *57* wavy line; tendency towards Huai: baroque animal handles. For Huai vessels with the same inscription see below.
C 169. Kuei, lid. *57* wavy line; tendency towards a Huai: *61* interlacery.

Tsin:
C 172. Ting. *39* bent ears; *49* curved legs; *57* wavy line; *58* broad figured band (very dissolved); very badly drawn.
C 173. Ting. Our Pl. XLIX. *49* curved legs; *57* wavy line; *58* broad figured band.
C 174. Kuei. Photo Shuangkien 16. *51* footed Kuei; *53* grooves.

Wei:
C 177. Li. *44* arched Li; *49* curved legs; *59* back to back dragons.
C 179. Fu. *45* Fu; *58* broad figured band; incipient Huai: *61* interlacery.
C 180. Hu. No distinctive features.
C 181. Fu. *45* Fu; *58* broad figured band; *59* back to back dragon.

Wu (Yü):
C 184. Fu. Drawing bad and useless.
C 185. Kuei. *51* footed Kuei; *53* grooves.

Ying:
C 191. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.

Yü:
C 193. Hu. Our Pl. LI. *57* wavy line; *58* broad figured band.

State X:
C 194. P'an. Our Pl. LI. *39* bent ears; *58* broad figured band.
C 195. Kuei. Photo Shïerkia 5: 17. *51* footed Kuei; *52* spiral horns; *53* grooves; *58* broad figured band.

Chou clan names:
D 2. Kuei. *53* grooves.
D 4. Photo Mengwei, Shang 26, our Pl. XL. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
D 5. Fu. Photo Mengwei, Sü 11, our Pl. XLIII. *45* Fu; *55* scale band; *57* wavy line.
D 6. Kuei. *53* grooves.
D 7. Kuei. *51* footed Kuei; *52* spiral horns; *53* grooves; *56* vertical scales; *58* broad figured band.
D 8. Ting. *49* curved legs; *55* scale band.
D 9. Fu. Our Pl. XLIII. *45* Fu; *58* broad figured band; *59* back to back dragons.
D 10. Fu. *45* Fu; *55* scale band; *57* wavy line.
D 11. Ih. *46* Ih; *53* grooves; *55* scale band.
D 12. P'an. Photo Paoyün 78, our Pl. XLIV. *39* bent ears; *42* P'an; *55* scale band; *57* wavy line.
D 14. Li. Photo Senoku I: 9. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 16. Ting. *49* curved legs; *55* scale band; *57* wavy line.
D 17. Li. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 19. Sü. *47* Sü; *53* grooves.
D 20. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.
D 22. Ting. *49* curved legs; *56* vertical scales; *58* broad figured band; below the scales a narrow border of *29* spiral filling — looks very suspect (Sung catalogue).
D 23. Li. *44* arched Li; *50* fin flanges; *57* wavy line; possibly an incipient Huai element: *66* warts (the drawing ambiguous).
D 24. Li. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 25. Li. Photo Senoku I: 7, our Pl. XXXVII. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 26. Li. Photo Umehara II: 96, Museum of Fine Arts, Boston. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 27. Ih. *46* Ih; *52* spiral horns; *53* grooves; *55* scale band; *58* broad figured band.
D 28. Kuei. Photo Paoyün 68, our Pl. XXXIX. *51* footed Kuei; *53* grooves; *55* scale band.
D 29. Ting. *49* curved legs; *56* vertical scales; *58* broad figured band.
D 31. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.
D 32. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band; badly drawn.
D 33. Kuei. Photo Umehara II: 118, Museum of Fine Arts, Boston. *51* footed Kuei; the photo indistinct whether spiral filling or not.
D 36. Hu. *55* scale band; *57* wavy line; *58* broad figured band; incipient Huai: *29* spiral filling (revived), *66* warts.
D 37. Li. *44* arched Li; *59* back to back dragons.
D 38. Li. Our Pl. L. *44* arched Li; *54* vertical stripes; *55* scale band.
D 41. Fu. *45* Fu; *58* broad figured band; *59* back to back dragons (very dissolved) with a tendency to Huai *61* interlacery.

D 42. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band.
D 45. Kuei. *51* footed Kuei; *53* grooves; *55* scale band; *58* broad figured band.
D 46. Kuei. *51* footed Kuei; *56* vertical scales; *58* broad figured band.
D 47. Hu. No distinctive features.
D 48. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
D 49. Hu. Our Pl. LI. *55* scale band; *56* vertical scales. Late Middle Chou.
D 49 a. Ting. Photo Shïerkia 11: 21. *58* broad figured band; (the curve of the leg *49* is hidden under an animal's head).
D 50. Kuei. *51* footed Kuei; *53* grooves; *58* broad figured band.
D 51. Kuei. No distinctive features.
D 52. Ih. *46* Ih; *53* grooves; *55* scale band.
D 53. Li. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 55. Li. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 56. Li. *44* arched Li; *50* fin flanges; *54* vertical stripes.
D 57. Ih. *46* Ih; *53* grooves; *55* scale band.
D 58. Sü. *47* Sü; *53* grooves; *55* scale band.
D 59. Ting. Photo Shïerkia 7: 6. *49* curved legs (here the legs are curved, though very slightly; Shan 2: 55 draws them straight — bad drawing or a real difference between two vessels of the same set?).
D 62. Kuei. *39* bent ears; *51* footed Kuei; *58* broad figured band; archaizing feature: *36* vertical ribs.
D 63. P'an. *39* bent ears; *42* P'an; *58* broad figured band.
D 64. Ih. *46* Ih; *53* grooves.
D 66. Li. *44* arched Li; *49* curved legs; *59* back to back dragons.
D 67. Ting. *49* curved legs.
D 68. Ho. The vessel looks dreadful, but the drawing may not do it justice, since it has been accepted by an expert like Wu Ta-ch'eng. *58* broad figured band strongly corrupted.
D 69 a. Ting. Photo Shïerkia 5: 6. *49* curved legs; *58* broad figured band.
D 70. Ting. Photo Wuying 24. *48* shallow Ting; *55* scale band; *58* broad figured band; very unusual pointed legs.
D 72. Fu. *45* Fu; *55* scale band; *57* wavy line; *58* broad figured band.

X-fu names:

E 5. Kuei. Photo Tch'ou XIII. Difficult to place: it seems to have *52* spiral horns, and at the same time *29* spiral filling; the shape of the vessel also is very unusual.
E 6. Sü. *47* Sü; *53* grooves; *58* broad figured band.
E 8. Ting. *49* curved legs; *55* scale band.
E 9. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.
E 11. Kuei, lid. *53* grooves; *58* broad figured band.
E 12. Ting. *39* bent ears; *49* curved legs; *55* scale band.
E 13. Kuei. lid. *53* grooves; *55* scale band.
E 14. Kuei. *51* footed Kuei; *52* spiral horns; *53* grooves; *55* scale band.
E 16. Li. *44* arched Li; *50* fin flanges; *57* wavy line.
E 17. Li. Mixed Yin-Chou and Middle Chou styles: *15* t'ao-t'ie; *29* spiral filling; *39* bent ears; *44* arched Li; *50* fin flanges.
E 19. Kuei, lid. *53* grooves; *55* scale band.
E 21. Kuei. *58* broad figured band in a very corrupted form.
E 23. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
E 26. Sü. *47* Sü; *52* spiral horns; *53* grooves; *58* broad figured band.

E 27. Photo Paoyün 70. *51* footed Kuei; *52* spiral horns(?); *53* grooves; *55* scale band.
E 28. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.
E 30. Ting. *49* curved legs.
E 31. Sü, lid. Photo Mengwei, Shang 18. *47* Sü; *53* grooves; but the handles are in shape of free-sculptured *19* trunked dragons — archaizing feature.
E 32. Hu. Our Pl. XXXV. *52* spiral horns; *55* scale band; *58* broad figured band.
E 33. Fu. Photo Mengwei, Sü 14. *45* Fu; *56* vertical scales; the latter are of a late type, and there is an incipient Huai feature: *23* cicada (revived, very stylized).
E 34. Kuei. *51* footed Kuei; *53* grooves; *55* scale band.
E 35. Ih. *46* Ih; *52* spiral horns; *53* grooves; *55* scale band.
E 41. Ting. *49* curved legs.
E 42. Ting. Our Pl. XXXV. *39* bent ears; *48* shallow Ting; *49* curved legs; *58* broad figured band.
E 43. Kuei. *51* footed Kuei; *53* grooves; *56* vertical scales; *58* broad figured band.
E 44. Fu. *45* Fu; *55* scale band; *57* wavy line.
E 45. Ting. *49* curved legs; for the rest indistinct.
E 47. Fu. *45* Fu; *55* scale band; *58* broad figured band; *59* back to back dragons: the latter strongly corrupted with a Huai tendency of *61* interlacery.
E 51. Sü. *47* Sü; *53* grooves; *55* scale band; *56* vertical scales (the latter drawn so as to resemble *25* hanging blades, probably bad drawing in this Sung catalogue).
E 52. Ting. *58* broad figured band.
E 53. Kuei, lid. *53* grooves.
E 55. Hien. Our Pl. XLIX. *55* scale band; *57* wavy line.
E 56. Tou. Our Pl. L. *57* wavy line; *58* broad figured band. Apparently a feature of incipient Huai: *66* warts.
E 57. Ih. *46* Ih; *53* grooves; *55* scale band.
E 58. P'an. *39* bent ears; *42* P'an; *58* broad figured band.
E 59. Sü. *47* Sü; *53* grooves; incipient Huai feature: *23* cicada (revived, highly stylized).
E 62. Kuei. *51* footed Kuei; *53* grooves; *55* scale band. Photo of lid Shuangkien 15
E 64. Hien. A square shape which is late; *39* bent ears.
E 69. Hu. *55* scale band; *58* broad figured band, very corrupted. Poor drawing.
E 70. Li. *44* arched Li; *50* fin flanges; *57* wavy line. Poor drawing.
E 71. Photo Shuangyü 8. *49* curved legs.
E 72. Kuei. *51* footed Kuei; *52* spiral horns; *53* grooves; *55* scale band.
E 73. Ting. *49* curved legs.
E 75. Photo Shïerkia 5: 20. Kuei, lid. *53* grooves; *58* broad figured band.
E 77. Li. Photo Shïerkia 6: 5. *44* arched Li; *54* vertical stripes; *55* scale band.

In the preceding lists of vessels from categories B II, B III, C, D and E we have had to eliminate 16 vessels (B 98, 126, 129; C 3, 6, 28, 134, 146, 148, 153, 156, 180, 184; D 47, 51; E 5) which were either too inferior in quality or too badly drawn, or too void of distinctive features to be of any use. Further 3 vessels (B 78, 95, 130) which have Yin-Chou style (archaizing), and one (B 123) in Huai style (spurious?). We have furthermore 9 cases of admixture of Yin-Chou elements (B 125; C 97; D 62; E 17, 31 and B 131, 146, 169; D 22), the last 4 of which, however, are from somewhat unreliable Sung-time

sources. We have 15 cases (C 16, 17, 39, 64, 88, 141, 166, 169, 179; D 36, 41; E 33, 47, 56, 59 — none of which in cat. B, Western Chou) of admixture of Huai elements.

After all these reductions we have a bulk of 240 clear Middle Chou vessels.

THE HUAI STYLE.

The beginning of the Huai style cannot be dated with such remarkable accuracy as that of the Middle Chou style. We find it clearly attested in the 6th century, and it lives on down to the Ts'in dynasty. The Huai-style objects are — apart from the bells — but rarely inscribed. Hence our material, which comprises exclusively inscribed vessels, are very meagre in regard to the Huai style, and in determining some of its principal features we have to refer, for corroboration, to uninscribed vessels recorded in Umehara, Eumorfopoulos, Senoku, Wuying and other sources. The Huai art has three principal components:

Yin style elements, obsolete in the Middle Chou style but now revived. These are: *14* free animal's head; *15* t'ao-t'ie (in a modified form); *22* snake; *23* cicada; *24* rising blades; *25* hanging blades; *28* scaled animals; *29* spiral filling; *33* interlocked T's; *35* whorl-circle. Some examples of these are to be found in our illustrations:

14. LIII: D 30.
22. LIV: C 152; LV: C 98; LVIII: C 24, C 25.
24. LV: C 98; LVII: C 35; LVIII: C 145, C 182.
25. LII: C 183; LVI: D 43; LVII: C 120.
28. LV: C 98.
29. LV: C 98; LVI: D 43; LVIII: C 124, C 182, C 24, C 25.
35. LV: C 98.

Middle Chou elements. These are: *43* Chung; *45* Fu; *46* Ih; *49* curved legs. Examples:

43. LV: C 34, C 98; LVII: C 129; LVIII: C 124, C 145, C 182, C 24, C 25.
45. LVII: C 46, C 29.
46. LVI: C 186, C 5.
49. LVI: C 128, C 126; LVII: C 120.

New elements of its own. These are:

60. »Squat Ting».

This is a very broad Ting, low in proportion to its breadth, which became later the regular type in Han time. Pl. LVI: C 126.

61. »Interlacery».

Under this very general denomination we have brought together a number of elements which are apparently very heterogeneous but which have a certain

affinity: there are snakes or dragons or snakes with bird's heads with the bodies interlaced; there are mere bands or lines similarly interlaced; there are small dragons which are not directly interlaced (the coils do not cross each other) but which are crowded so as to lie enfolding or gripping each other, a teeming mass of writhing bodies. Pl. LIII: D 30; LIV: C 152; LVI: C 128, C 126, D 43, C 186; LVII: C 29, C 120, C 171, C 129; LVIII: C 124, C 145.

62. »Hooks».

This is the element called »teeming hooks and volutes» in »Exhibition of early Chinese Bronzes»: a crowded pattern made up of comma-shaped little hooks etc. Pl. LII: C 183; LV: C 34.

63. »Plait».

The plait pattern. Pl. LVI: C 151.

64. »Rope».

The rope pattern. Pl. LVII: C 35.

65. »Rings on lid».

Rings placed vertically on lids. Pl. LIV: C 147.

66. »Warts».

This may serve as an expressive short term for the small bosses or studs which mark the eyes of dragons, or such-like point-shaped elements of the decoration. Pl. LIII: D 30; LVI: C 186, C 5; LVIII: C 182.

67. »Dots».

The dot-filling or dotted lines. Pl. LVIII: C 24, C 25.

68. »Spiral circle».

This is different from the »whorl circle» above (*35*) in that the circle or flat boss is filled with one single spiral. Pl. LVII: C 129.

69. »Huai geometrical patterns».

Various geometrical patterns, peculiar to the Huai style, see e. g. Umehara vol III *passim*. Pl. LVI: C 151.

We now pass in review our Huai vessels:

Ch'en:

C 2. Fu. *45* Fu; *61* interlacery; *66* warts.
C 5. Ih. Our Pl. LVI. *46* Ih; *61* interlacery; *66* warts.

Chu[1]:

C 24. Chung. Our Pl. LVIII. *43* Chung; *22* snake; *29* spiral filling; *67* dot filling.
C 25. Chung. Our Pl. LVIII. *43* Chung; *22* snake; *29* spiral filling; *67* dot filling (in the middle of the lower field, cf. the drawing Huaimi, Hia 2).
C 26. Chung. Drawing bad and useless.

Ch'u:

C 29. Fu. Our Pl. LVII. *45* Fu; *61* interlacery.
C 30. Chung. *43* Chung; *29* spiral filling (of the square, tightly compressed Huai type).
C 31. Chung. *43* Chung; *61* interlacery; *66* warts; *68* spiral circle; Middle Chou reminiscences: *58* broad figured band, very dissolved; *59* back to back dragons, corrupted.
C 32. Urn. No really distinctive features; the handles seem to indicate Huai, but the drawing is too poor to say anything definite.
C 33. Ting. Useless photo in Hueik'ao sü 34, good photo in Shïerkia 1: 2. *69* Huai patterned décor; the P'an with the same inscription, Shïerkia 10: 25, is plain, with no distinctive criteria.
C 33 a. Fu. Photo Shïerkia 10: 18. *45* Fu; *69* Huai patterned décor.
C 34. Chung. Photo Tch'ou XXIII, our Pl. LV. *43* Chung; *62* hooks; a set of bells with the same inscription in Middle Chou style see above.
C 35. Cup. Our Pl. LVII. *24* rising blades (revived); *64* rope.
C 36. P'an. Photo in Ch'uan ku pie lu. Very tight and small square pattern, quite unlike anything in Yin-Chou or Middle Chou.
C 37. Chung. Drawing bad and useless.
C 38. Hu. In spite of the dreadful drawing, a Huai vessel (*61* interlacery) can still be discerned.

Han[2]:

C 41. Chung. The famous Piao bells. *43* Chung; *15* t'ao-t'ie (revived); *61* interlacery; *22* snake worked into *68* spiral circle.

Hü:

C 45. Chung. *43* Chung; drawing very bad, yet Huai style discernible: *29* spiral filling; *61* interlacery.
C 46. Fu. Our Pl. LVII. *45* Fu; Huai with Middle Chou reminiscences: *57* wavy line worked into a crowded Huai pattern of small C spirals.

Jo:

C 47. Chung. *43* Chung; *24* rising blades (*23* cicada); *68* spiral circle; Middle Chou reminiscence: *58* broad figured band.

Lu:

C 93. P'an. *39* bent ears; *42* P'an; *61* interlacery; this latter consists of small, teeming dragons, being a dissolved Middle Chou *58* broad figured band.

Lü:

C 98. Chung. Photo Eumorfopoulos II: 1, our Pl. LV. *43* Chung; *22* snake; *24* rising blades; *28* scaled animal (snake); *29* spiral filling; *35* whorl circle; *64* rope.

Shao:

C 114. Hu. *61* interlacery; *66* warts; poor drawing.

Su:

C 120. Ting with lid. The drawing is very ugly, but as so often it probably does no justice to the vessel, which is interesting because of its combination of elements. Our Pl. LVII. *39* bent ears; *49* curved legs; Huai: *25* hanging blades (derived from cicadas); *61* interlacery; admixture of Middle Chou: *55* scale band.

Sung:

C 124. Series of bells, of which one our Pl. LVIII. In spite of the dreadful drawing in the Sung catalogue, the Huai character of these bells is obvious: *61* interlacery (coiling snakes or dragons at the bottom); *29* spiral filling (in the tight, square Huai version) on the suspending bow; for the rest the drawing defies analysis.
C 125. Lid. *65* rings on lid.
C 126. Ting. Our Pl. XLVI. The drawing is ugly but the vessel in interesting. *39* bent ears; *60* squat Ting; *61* interlacery; reminiscence of Middle Chou: *56* vertical scales (in a late version).
C 127. Lid. Evidently a Huai piece, but too badly drawn to be relied on.

Sü:

C 128. Ting. Our Pl. LVI. *49* curved legs; *61* interlacery.
C 129. Chung. Our Pl. LVII. *43* Chung; *61* interlacery; *66* warts(?); *68* spiral circle.
C 130. Chung. *43* Chung; *62* hooks.
C 132. Chï. No distinctive features.

Ts'ai:

C 139 a. Ih. Photo Shïerkia 6: 17. *46* Ih; *61* interlacery; *64* rope.

Tseng:

C 142. Fu. Photo Wuying 38 is unfortunately indistinct; from the shape and the analogy with Umehara 178 it seems likely that it is a Huai vessel.

Ts'i:

C 145. Series of bells of two types, both in our Pl. LVIII. In spite of the bad drawing in the Sung catalogue, the Huai character is evident: on the Po bell, *61* interlacery, and the very baroque suspending part; on the Chung bells, *24* rising blades, *61* interlacery, probably also *66* warts.
C 147. Tuei. Photo Umehara III: 203, our Pl. LIV. *65* rings on lid.
C 151. Tou. Our Pl. LVI. *63* plait.
C 152. Kuei. Photo Eumorfopoulos I: 36, our Pl. LIV. The dominant feature is Huai: *61* interlacery; strong admixture of Middle Chou: *55* scale band; *58* broad figured band; crown on lid in shape of *57* wavy line.
C 158. Chung. *43* Chung; *61* interlacery; *66* warts.
C 159. Chung. Drawing bad and useless.
C 161. Fu. Postcard photo indistinct. Drawing in Kukien 29: 6 indicates small dragons reminding of Huai. Too uncertain.
C 162. P'an. Seems to have *61* interlacery, but the drawing is too bad to be relied upon.
C 165. Tan. No really distinctive features; the handles are such as often occur on Huai vessels.
C 167. Tuei. Photo Wuying 79. Same inscription as a Kuei treated under Middle Chou above. Placed here because of the handles, cf. next.
C 167 a. Spherical vessel. Photo Shïerkia 5: 13. *65* standing rings.

C 168. Tuei. No distinctive features.
C 170. Hu. Photo Umehara III: 213. The handle has the Huai modified *15* t'ao-t'ie mask; *69* Huai patterns. This vessel is studied in detail by Professor Andersson.

Tsin:

C 171. An. Our Pl. LVII. *61* interlacery; Middle Chou reminiscence: *57* wavy line.

Ts'in:

C 175. Chung. In spite of the dreadful drawing in the Sung catalogue, the Huai character of the vessel is quite discernible: *61* interlacery; *29* spiral filling; probably also *66* warts.
C 176. Kuei. Photo Tahi t'ulu 127. The dominating feature is Huai: *61* interlacery; admixture of Middle Chou elements: *53* grooves; *57* wavy line.

Wu (Kou-wu, Kung-wu):

C 182. Set of bells. Our Pl. LVIII. *43* Chung; *22* snake; *24* rising blades; *29* spiral filling; *66* warts. The snake heads protruding from the central square-spiral filled field are fairly well discernible on the Sükia vessel, but not on the Shan vessel reproduced in our plate; a picure postcard of the Palace Museum shows the warts very clearly but for the rest gives no information.
C 183. Kien. Our Pl. LII, Oeder collection. *25* hanging blades; *62* hooks.

Yen:

C 186. Ih. Our Pl. LVI. *46* Ih; a crowded pattern kindred to *61*; *66* warts.

Chou clan names:

D 1. Chung. *61* interlacery. Very poor drawing.
D 3. Ih. Drawing (or vessel?) very bad.
D 15. P'an. *39* bent ears; *42* P'an; *61* interlacery. Poor drawing.
D 18. Hu. *61* interlacery; *66* warts; Middle Chou reminiscences: *52* spiral horns; a band round the neck which may be a badly dissolved *58*. The drawing is very poor, and probably does no justice to the vessel recorded by Wu Ta-ch'eng.
D 30. Urn. Our Pl. LIII. Seligman collection. *14* free animal's head; *61* interlacery; *66* warts.
D 35. Hu. *29* spiral filling; an interlaced pattern which suggests Huai, somewhat reminding of *33* interlocked T's; *64* rope; drawing in Kukien bad and useless; picture postcard of the Palace Museum shows the vessel to be good.
D 43. Tou. Our Pl. LVI. *25* hanging blades; *29* spiral filling; a crowded pattern reminding of certain variants of the *61* interlacery.

X-fu names:

E 10. Bad and useless.
E 15. Hu. Probably *61* interlacery and *66* warts; drawing very bad and unreliable in the Sung catalogue.
E 20. Ih. *46* Ih; *29* spiral filling; *61* interlacery.
E 50. Hu. Very badly drawn, but probably a Huai vessel (a. o. *25* hanging blades); useless.

After the elimination of 16 cases (C 26, 32, 37, 127, 132, 142, 159, 161, 162, 165, 168; D 1, 3; E 10, 15, 50) which are too bad vessels or too poor drawings or indifferent vessels, we find 38 pure Huai vessels and 9 Huai vessels with admixture of Middle Chou elements (C 31, 46, 47, 120, 126, 152, 171, 176; D 18).

SUMMARY.

As a point of departure for our summary we revert once more to our remark on p. 86 above: there is a striking parallelism between the period distinctions of the inscriptions and the distinctions of style. By purely epigraphical arguments we have set aside a group of 337 vessels, 303 of which are such as can be built upon for stylistic studies (see p. 109), as having been made in Yin time: their characters *ya, si tsï sun, kü* never (with 2 exceptions, see p. 23) occur in our 649 inscriptions which contain Chou-time names and facts. Here we now find that the style elements (*43—58*) which are the most common ones in vessels with Chou-time inscriptions (containing Chou names and facts) — occurring indeed in 264 out of 431 adequately illustrated specimens with Chou inscriptions (see p. 129) — never occur in our 303 vessels with Yin inscriptions (*ya, si tsï sun, kü*).[1]) And, as we have already preliminarily stated on p. 87 above: the epigraphic and the stylistic distinctions coincide even more in detail; when we divide the Western Chou epoch (1122—771 B. C.) into two halves according to the inscriptions: a first half (1122—947) and a second half (946—771), we find that there is a corresponding stylistic distinction, with but very few exceptions and irregularities: the vessels which the inscriptions date in the first period (1122—947) have in all essentials preserved the Yin style (Yin-Chou style period); the vessels which the inscriptions date in the second period (946—771) show a new and entirely revolutionized style, the Middle Chou style, which not only fills these centuries to the absolute exclusion of the earlier art (that of Yin and Yin-Chou) but also lives on for several centuries of Eastern Chou (from 770 B. C.). Nothing could be more convincing as to our right to draw typological conclusions from the chronological categories which the inscriptions have enabled us to establish.

THE YIN STYLE.

We shall now first turn to the Yin time vessels and the Yin style and state the extremely important fact that already in Yin time the Chinese bronze art had reached its apogee such as Western authors have generally admitted only in the case of the Chou epoch. There is a richness and variety in types and forms of vessel, technique and decorative motifs which necessarily presupposes a great many centuries of vigorous and varied evolution.

Of types of vessel we have a very great variety. A whole series of the Yin types — *1* square Ting, *2* Li-ting, *3* Yu, *4* Ku and Tsun, *5* Yi, *6* Tsüe and *7* Kuang — are fully and richly developed in Yin time, some of them in many varieties, and they live on through the epigonous period of Yin-Chou, only to disappear entirely in Middle Chou and Huai (we shall revert presently to this question). In this respect, then, the Yin period was already the richest of the four periods.

[1]) There are, as we have seen (p. 109), only 3 exceptions to this rule.

The decoration of the body of the vessel ranges from extreme simplicity to extreme overloaded richness. We have an entirely plain body (none the less far from »primitive», on the contrary very elegant), e. g. Pl. V: A 96; a plain body with only one or several horizontal lines, (Pl. XXIII: A 67); a plain body with only an animal's head in free sculpture and whorl-circles (whorl-bosses) (Pl XXVI: A 86); a plain body with only a narrow band at the neck or at the base, filled with some very simple geometrical pattern (Pl. XXXII: A 80; XXIX: A 43); a broader band or several bands filled with geometrical patterns or with animal figures, or with badly dissolved animal figures on their way to becoming mere geometrical patterns (III: A 246; IV: A 247; VII: A 193; XVII: A 269); the whole body filled with various patterns, often extremely crowded (V: A 20; XIV: A 145; XXIII: A 287; XVIII: A 54).

The distribution of the decoration over the body is of two widely different kinds. Sometimes it is determined by keel-like flanges, which divide the body in regular sections or panels (VI: A 38); this sectional arrangement either concerns the whole vessel, the flanges stretching from top to bottom (XXII: A 110; XXIII: A 287); or it concerns only parts of the body (III: A 246; XIX: A 124). Sometimes, on the contrary, there are no flanges at all, and the decoration is freely disposed over the surface (IV: A 247; XVII: A 107, A 269).

The elements of the decoration vary considerably.

There are animals: dragons of many kinds (*17—21*), birds of several kinds (*16*), snakes (*22*), t'ao-t'ie (*15*), cicadas (*23*), more rarely elephants; sometimes they are quite realistic (Pl. I: A 1, A 2; II: A 24; XXXII: A 122), sometimes less so (Pl. III: A 246; IV: A 247; VII: A 193; XXXII: A 208), sometimes so badly dissolved (e. g. cicadas into blades, *24*, *25*, or the animal in three sections, *27*) that only a very attentive eye can detect that they are not simply geometrical patterns.

There are various geometrical patterns: spirals of various kinds (*29*, *30*, *31*), circle-filled bands (*34*), whorl-circles (*35*), surfaces filled with compound lozenges (*32*), series of T-shaped scores (*37*), surfaces filled with interlocked T's (*33*), crescent-cornered quadrilaterals (*38*). These various patterns may be fully preserved, but they may also be badly dissolved. Already in Yin time we have examples of the whorl-circle being corrupted into a circle filled with small circles (a common feature in Huai, cf. White, The Tombs of old Lo-yang).

The ground between the decorative elements may be bare or else filled with spiral patterns (*29*, »lei-wen»).

The technique of the decoration varies just as widely. There are patterns executed only in a thin thread relief (Pl. XIX: A 219); others are effected by the contours being engraved (Pl. VI: A 38, legs); there is very low and flat relief, which causes the surface to give a perfectly smooth and even impression (Pl. IV: A 247; IX: A 159); there is a higher and more plastic relief (Pl. II: A 6); there is a very vigorous and extra high relief, which makes the elements

stand out almost as if sculptured (Pl. III: A 28). Eyes of animals may be slightly protruding (Pl. III: A 246) or strongly protruding (Pl. II: A 24). Lower or higher spikes (*12*) may stand out from the surface.

The accessories to the body of the vessel can also vary infinitely. The legs may be stiff, straight, cylindrical (*8*), or they may be richly sculptured animals (dragons, birds, *9*). The legs may be bare (Pl. II: A 24) or adorned with animal's heads (Pl. I: A 2) or with cicada-blades (Pl. II: A 6). The handles of Kuei may be very simple, with just a plain animal's head (Pl. XI: A 302), or more elaborated (Pl. XIV: A 145). The handles of Lei may or may not have rings (Pl. XXVI: A 86; XXX: A 92). The handles of Yu may be plain (Pl. XXIV: A 226) or decorated (Pl. XX: A 56) or twisted (Pl. XXIII: A 287). The lids may have flat, disc-shaped handles (Pl. XX: A 56) or they may have knobs, the latter either spherical or peaked in various ways (*10*).

We have insisted on this extreme variety, because our materials prove that the first great classical art in China was mature, finished, ready in all its details and in all its infinite varieties already in Yin time, and there was but little to add in early Chou time.[1])

[1]) Dr. Nils Palmgren in »Exhibition of Early Chinese Bronzes» has placed various vessels in the Middle Chou category on the strength of elements frequently occurring already in Yin time:

Pl. XVII. Kuei belonging to Mr. Ernst Trygger. Palmgren (p. 107): »The style is typical Middle Chou with, on the whole, a smooth body and the décor executed in relatively narrow, horizontal zones in low relief, with raised portions only here and there, e. g. for eyes and animal masks. Typical features, too, are the low, horizontal lines of the foot and the gentle curves of the handles. . . . . Round the bottom of the lid is a decoration consisting of a band of kuei motifs repeated eight times. The conventionalism of the design is carried to extremes, and apart from the eyes there are no longer any naturalistic details observable. Around the top of the body is a similar decoration: a band of eight kuei. In two places these are separated by heads of beasts of prey in high relief». We have seen above that all these elements occur in Yin time, and are by no means typical of Middle Chou — on the contrary, most of them are excluded there. Moreover, the vessel carries the *ya hing* of the Yin epoch and is therefore included in our Yin list: A 137, criteria *14* free animal's head, *27* animal triple band.

Pl. XVIII. Tsun belonging to the Kunstindustrimuseum of Copenhagen. Palmgren (p. 108): »The actual t'ao-t'ie masks still retain something of the Yin-Chou style's archaic features, but the vessel's soft silhouette, large undecorated panels, simple horizontal lines and lack of raised, vertical ridges, all point to the probability of its belonging to the Middle Chou style. Within that style it is best referred to the special group that possesses a high, and, on the whole, varied relief». This vessel is almost identical with a whole series of Tsun which have Yin inscriptions, e. g. A 93 (Pao Yün 99). The criteria adduced by Palmgren suit the Yin period perfectly. The lack of raised vertical ridges (flanges) is by no means an indication of Middle Chou.

Pl. XXI A. Kuei belonging to Mr. A. Jonsson. Palmgren (p. 109): »The vessel is typical of the Middle Chou period. The decoration is in somewhat flat relief with raised portions, such as eyes and animal masks. Large undecorated surfaces predominate on the vessel, and the silhouette shows a gentle curve. The tops of the handles are in the form of harelike heads. The decorative bands contain highly conventionalized kuei, in which the naturalized details, except the eyes, have disappeared. Exactly between the handles, on the upper band, are the masks of beasts of prey in fairly

This is really — or at least should be — no novelty. It is only what the Chinese archæologists have maintained for a long time. In their catalogues we find all these various types classified as Yin (Shang). But whereas the Chinese scholars have never proved them to belong to that time, we now, thanks to the testimony of the *ya hing*, *si tsï sun* and *kü*, are in a position to confirm the guesses of the Chinese collectors by definite proofs.

There are two principal reasons why Western art historians and sinologues have never accepted the Chinese views but have insisted that the great classical art of the type which we here call the Yin style reached its full development not in Yin time but during the many centuries of the Chou dynasty (1122—256).

In the first place, texts have taught us practically nothing of the Yin dynasty, and it has therefore not seemed plausible to imagine this period, remote and probably »primitive», as being a time that could witness the full growth of such a splendid and mature art; about the Chou dynasty, on the other hand, we know a great deal; we have been fully aware that it was a period of great cultural activity: nothing could be more rational than to guess that this great epoch of political expansion and cultural development was the epoch that saw the growth of the classical bronze art from a »primitive» stage up to a rich perfection. This reason is no longer valid. From the An-yang finds we now know what a delicately elaborate art the Yin people were capable of producing, and there is nothing unreasonable in accepting the testimony of the inscribed vessels and attributing the first mature bronze art to them.

In the second place — and perhaps even more important — the attitude of Western students has been due to the fact that they have not suspected or at least not fully realized the existence of the Middle Chou style such as we have determined it in the present paper. And the reason for this, again, is very simple. There were two grand bronze arts of Chinese antiquity: Yin and Huai. The bronze art in between, Middle Chou, is not very beautiful, is not of a really

high relief». The vessel is a typical Yin or Yin-Chou piece. Criteria: *14* free animal's head, *27* animal triple band (on both neck and base).

Pl. XXI B. Kuei belonging to Mr. Anders Hellström. Palmgren (p. 110): »The vessel is decorated with two bands in low relief, the one on the upper half of the body, the other on the ring-foot. On these bands are circles containing spirals and alternating with highly conventionalized kuei. At the top of the handles are heads resembling those of hares. The style is typical Middle Chou». The vessel is typical Yin or Yin-Chou. Criteria: *15* t'ao-t'ie (badly dissolved), *29* spiral filling, *35* whorl circle.

Pl. XXII. A. Ku belonging to Mr. Anders Hellström. Palmgren (p. 110): »The decoration consists of simple linear elements in low relief, the whole now much decomposed: on the body and foot and the lower part of the collar are kuei and t'ao-t'ie, on the trumpet-shaped upper part of the collar are cicadas». These elements denote not Middle Chou but Yin or Yin-Chou. Criteria: *4* Ku; *15* t'ao-t'ie, *20* winged dragon; *24* rising blades.

Pl. XXII B. Chï belonging to Mr. Anders Hellström. Palmgren (p. 110): »Decoration on the collar: below, a border divided into panels in which are highly conventional bird motifs». The vessel should be placed in Yin or Yin-Chou. Criteria: *24* rising blades, *29* spiral filling.

high and imposing quality (except perhaps in sporadic cases). Hence the foreign collectors have never exhibited any interest in and seldom bought Middle Chou vessels. In the Eumorfopoulos collection catalogue Vol. I, the ritual bronzes anterior to Han are 32 in number, and of these only 3 belong to the Middle Chou style! We have known (or thought we knew) that the Huai style (»Ts'in style») could not be very much anterior to the Han dynasty. The only art we have really known and appreciated that was earlier than the Huai art was the classical style here called Yin (and Yin-Chou): it was quite naturally considered to be the art which extended throughout the major part of the 8 centuries of the Chou dynasty.

The Chinese scholars have had the advantage over us that they have collected bronzes with a view not only to their artistic value but also to their archæological interest, and notably to their inscriptions. Therefore a collector like Tuan Fang in his T'ao chai ki kin lu illustrates 126 ritual vessels anterior to the Han dynasty, and of these no less than 40 belong to our Middle Chou style.

When we find that out of our 431 good illustrated vessels with inscriptions that contain Chou names and facts 240 belong to the Middle Chou style, as against 116 in the classical Yin (Yin-Chou) style, which has hitherto been considered to be *the* art of the Chou; and when the inscriptions clearly indicate that this Middle Chou style set in already about 950 B. C., to the absolute exclusion of the earlier classical style; and, finally, when consequently no more than two centuries (1122—947) remain (possibly less, if we follow the Chu shu ki nien chronology), in which the enormous crop of uninscribed vessels of the classical style would have to be placed, if they were to be products of the Chou epoch; then we can understand that we have entirely to revise our earlier opinions and to accept the testimony of the inscriptions: the classical bronze art was only to a small extent produced in the early centuries of the Chou era (1122—947) and was then only an epigonous art; the great era of that classical art was the Yin dynasty, and it must be the outcome of the activities of great Chinese artists during many centuries of the 2nd millennium B. C.

THE YIN-CHOU STYLE.

The conquest of the Chinese kingdom of Yin by the Chou princes — whether in 1122 or in 1050 or, say, around 1000 B. C. — apparently did not at once materially alter the Chinese civilization. At any rate it did not radically influence its art, such as it is revealed by the bronzes of the first half of Western Chou. The Yin-Chou art was in all essentials an epigonous art. The criteria of the Yin style (1—38) are all to be found in the Yin-Chou period; the general characterization of the Yin bronzes given above (p. 135 ff.) applies equally well to the Yin-Chou.

No doubt it will be possible in future to define various features which are

significant as criteria of this epigonous art as opposed to its predecessor. the original full-blooded Yin style; but this can be done only on the basis of a sufficient number of actual objects or adequate photographs, not of more or less primitive drawings. The material at our disposal permits us only to point out a few modest innovations.

One of these is the breaking up of the regular long segmented flanges into very fantastic, weird-looking hook-like projections. A glance at Pl. XVIII: B 24 will show us that this is a consequence of and a natural final stage in an evolution which makes the T-shaped scores or notches deeper and deeper and ends by cutting through the flanges entirely: the hook-like projections are the result.

Another feature that appears to be an important innovation is the introduction into the decoration of a new type of bird. We have earlier, in the Yin style, both very realistic birds (Pl. I: A 2) and birds with a very long, stylized tail kept horizontal (Pl. VIII: A 260). The new Yin-Chou bird, which becomes a great success and lives on through Middle Chou and Huai, has a vertical, plume-like tail and in most cases a plume-like crest on the head (Pl. XXI: B 36).

An extremely important innovation, though it crops up only very sparingly in Yin-Chou, gaining ground and becoming very common first in Middle Chou and Huai, is a new type of ears (handles). The Yin style ear always started straight from the rim and rose practically vertically. Now, from Yin-Chou and downwards, there appears an ear which starts an inch or two below the rim, projects horizontally at first and then takes an upward vertical turn; what we have here termed the »bent ear» (*39*).

Of the vessel P'an (round or oval tray or platter) we know of no certain Yin-time example. In Yin-Chou we have a few, and from Middle Chou onwards it becomes common. This type of vessel therefore seems to be an innovation of the Yin-Chou style (*42*).

The bronze art during the first five kings of the Chou dynasty was thus little more than the aftermath of the Yin art. The first three of them, Wu wang, Ch'eng wang and K'ang wang, had their hands full consolidating the new kingdom, the next two, Chao wang and Mu wang, were the conquerors who started in earnest extending the boundaries of the Chou domains by great and successful warlike expeditions. It was only after the achievements of the latter two that the Chou possessions developed into an empire. Before that it seems in reality to have been limited to the Shensi plain and the Honan regions; the feudal princes subordinate to Chou in more distant parts were but very loosely connected indeed with the house of Chou. The bronze art centres were therefore Shensi and Honan, and it is not astonishing that during this early period (1122—947) the Yin-time art traditions were not broken or superseded by new currents; it is obvious that the art epochs do not necessarily follow the dynastic periods.

It is also but natural that comparatively few vessels in the Yin-Chou style

derive from other parts than the Royal domains and their vicinity. Besides in Royal Chou (Shensi and Honan) we find it in the adjacent states situated in Shensi (the state of Shao) and Honan (the states of Cheng, Jo, Kuo, Man, Pei. Ts'ai, Wei, Ying, Yung), and in the Westernmost part of Shantung bordering on Honan (modern Yen-chou-fu: the states of Chu[4] and T'eng). Outside this central region we have only two stray vessels from a more distant region: modern Ts'ing-chou-fu in North Central Shantung (the states of Ki and Ts'i).

THE MIDDLE CHOU STYLE.

After the great expeditions of Chao wang and Mu wang — of which we know but little, owing to the scarcity of literary sources concerning the period anterior to 722 B. C., but which must have been very considerable, since they have left traces in the form of various romantic tales in the classical literature of later Chou — the soil was ready to receive new seed. The Chou kingdom had been considerably extended, feudal lords in various peripheral regions had been drawn more intimately into the community of Chou civilization, and the princes and nobles of the Chou Court itself, being members of the suite of the kings, had visited distant parts, received new impressions and very likely come into contact with new ideals of art. In any case it is from the reign of the 6th Chou king, Kung wang (946—935, orthodox chronology) that we have to date the sudden appearance and equally sudden complete victory of a new bronze art, the Middle Chou style.

The introduction of this new style around 950 B. C. was of a character that is highly interesting and which tallies well with the political causes just hinted at.

On the one hand, it was not, so to speak, a land-slide. It was not a foreign conquest which suddenly swept away *all* of the preceding art and introduced a new art that had no historical connection whatever with the Yin-Chou art. On the contrary, there are many and obvious points of contact, and we can clearly see that the inheritance from Yin-Chou time has been worked into the new art on many essential points. There are, for instance, besides more indifferent types of vessel such as Ting tripods and Kuei, the extremely peculiar archaic Chinese types such as Li tripods and Hien boilers; they were taken over from the earlier art, though in a modified form (Pl. XXXVI: C 107; XLIX: E 55, C 14). Again, in the decoration there are quite a number of important features which have been taken over from the earlier epoch. Some of them are unchanged: arched-backed dragon (Pl. XXV: B 155); S-shaped dragon (Pl. XXV: B 153); cleft dragon (Pl. XLVI: B 118); animal heads on handles (Pl. XXXVIII: B 90) and on the upper part of the Ting legs (Pl. XXXIV: B 142); lobes on handles (Pl. XXXVIII: C 80); small flanges dividing the surface in panels (Pl. XXXIX: C 103); the arrangement of an undecorated body with a horizontal band filled with décor (Pl. XXXV: E 42); S- or C-shaped spiral elements (often pronged) on handles

(but not on the body) (Pl. XL: B 132); diagonals (Pl. XLVIII: C 66); rings in the handles (Pl. XXXV: E 32). Others are clearly derived from the Yin (Yin-Chou) style but more or less modified: the simple scales filling animals' bodies in Yin and Yin-Chou here appear in quite new forms (*55*, *56*, cf. below) and arranged in new ways; certain S- and C-shaped figures of the earlier periods are now applied in a particular fashion, lying prone in bands (*58*, cf. below); the projecting »teeth» which often mark the upper end of the segmented flanges of the earlier periods revert in a modified form on one of the types of Middle Chou vessels, the »arched Li» tripod (Pl. XXXVII: C 8): certain specimens of this Li tripod seem to suggest even that the »back to back dragons» (*59*) are really a very free translation of the t'ao-t'ie mask of Yin and Yin-Chou (Pl. L: C 133).

On the other hand the innovations are so numerous, so radical and so sudden that we can with equally little justification speak of a natural, organic, slow evolution from the Yin-Chou art into the Middle Chou style. There is every appearance of a very strong and instantaneous influx of new ideas which, without destroying all the elements of the earlier art, revolutionized it so thoroughly that we have to regard it as a fundamentally new art. This influx of new ideas must, we think, be a result of the new policy of expansion pursued by Chao wang and Mu wang; their achievements bore fruit in the time of Mu wang's successor Kung wang, and from that time onwards the Royal Chou and by degrees also the many feudal courts all over Northern China unreservedly espoused the new art as it had been formed on the fundamental basis of the Yin art with a severe paring of archaic elements and a radical admixture of new elements. Whence these new elements were imported is a question which we refrain from attempting to answer at present.

There are various aspects of this revolution in art which call for some further extensive observations.

The types of vessel which disappear entirely are some of the most common and important ones of the earlier period: the square Ting (*1*), the Li-ting (*2*), the Yu (*3*), the Ku and the Tsun (*4*), the Yi (*5*), the Tsüe (*6*), the Kuang (*7*). This seems to be an extraordinary phenomenon, all the more so as it apparently does not tally with what we know from Chou-time texts. It is true that the Yu is very rarely met with in texts; it occurs practically only in the Shï king; in the Tso chuan we have it once (Hi 28), but there as a ceremonial gift in archaizing style; it never occurs in the Li ki, nor in Lun yü nor Meng tsï. But the Ku and Tsun and the Tsüe are much more enigmatic. These names of vessel occur quite frequently in the texts from the middle period of the Chou era, and it may appear very strange that we should have to assume that these types were utterly rejected from about 950 B. C.

This difficulty seems so serious that we might be tempted to say that the new decorative style (criteria *49*—*59*) concerned only certain types of vessel, particularly the Ting and the Kuei, and some new types: Chung, »arched» Li, Fu,

Ih. Sü (43—47), whereas the square Ting, the Li-ting, the Yu etc. continued to live on in their classical garb and were not exposed to the application of the new elements. But quite apart from the extreme improbability, not so say impossibility, of such an explanation, it fails utterly to account for a fundamental fact: why, if these square Ting, Li-ting, Yu, Ku, Tsun, Yi, Tsüe, Kuang lived on through the middle centuries of the Chou era, though conservative in decoration, should they never bear inscriptions revealing this later period (Middle Chou names and facts), just as well as all the Ting, Kuei, Chung, Fu, Ih, Sü (B II and a great many vessels in B III, C, D and E), which have such inscriptions? That the Ku and Tsüe have no long Chou inscriptions may be explainable by their shape, which is not suitable for more than a few characters (yet many of the well-known short Chou inscriptions could easily by applied to them); but the square Ting, the Li-ting, the Tsun, the Yi and the Yu could have (and had in Yin-Chou time) inscriptions of any length. Therefore, if these types occur neither with the inscriptions posterior to 947 B. C., nor with the decoration typical of the vessels posterior to 947, this must be due to the fact that the said types of vessel became obsolete from that time and were no longer made. This is confirmed by the fact that the Huai style, which we know so well from a great number of vessels, no more than Middle Chou possesses any of these types.

How are we then to explain the occurrence in Middle Chou literature of the vessel names Ku, Tsun and Tsüe? Evidently these names were not so strictly technical as we are disposed to believe. From their very technical and well-defined application in the ritual bronzes of the early period the names were generalized to refer to various secular household utensils of less specialized kinds, not necessarily made of bronze but of wood and earthenware. That this was so is revealed by the character for Tsun, which occurs sometimes with variants containing the radical *mu* »wood» and *fou* »earthenware». This literary phenomenon cannot therefore disprove our archæological conclusion as to the early disappearance of these ritual types of vessel.

If, then, Middle Chou sweepingly did away with a whole series of the most beloved types of Yin and Yin-Chou vessel, it created several important new ones. In the first place we have the Chung bell (*43*). The term Chung has often been erroneously used by Western writers; not all bells are Chung. Yin and Yin-Chou had bells (*Nao*, which are illustrated in Pl. XXVIII: A 178). But of real Chung we know of only one alleged Yin-Chou example (B 21). We have already pointed out that this case, besides being quite isolated, offers the peculiarity of a mixture of Yin-Chou and Middle Chou decoration and therefore inspires very little confidence. In any case, one swallow does not make a summer: the Chung became seriously current only from Middle Chou. The square tray, Fu (*45*), and the Ih »sauce-boat» (*46*, which should be clearly distinguished from the Kuang, *7* above) were new creations which proved a great success right down through Middle Chou and Huai. Out of the extremely popular Kuei

a new oblong variety, Sü (*47*), was invented. Out of the Ting they created an extremely graceful variety, the »shallow Ting» (*48*).

The decoration of the body of the vessel underwent an equally radical change. Most of the ancient animal designs disappear or are so conventionalized that they become unrecognizable. There are still occasionally to be seen arched-backed dragons, cleft dragons and S shaped dragons; there is even a dragon innovation in that the »back to back dragons» (*59*) — a feature very rarely met with earlier — now becomes a regular and popular feature. But the »gaping dragon» (*17*), the »vertical dragon» (*18*), the »trunked dragon» (*19*), the »winged dragon» (*20*) and the »feathered dragon» (*21*) all disappear. So do the »snake» (*22*) and the »cicada» (*23*), and also the »common bird» (*16*), i. e. the realistic and the long-tailed bird; on the other hand, there are still rare examples of the »tail-raising bird» (*42*). With the rejection of the cicada follows the disappearance of its derivate, the »blades» (rising blades *24*, hanging blades *25*, leg blades *26*); and the rudimentary animal (animal figure dissolved into three sections, *27*) follows suit.

Particularly striking is the disappearance of the most important of all the Yin and Yin-Chou animals, the t'ao-t'ie. There are but very slight reminiscences of it to be observed (B 95) and never any really forceful, realistic t'ao-t'ie heads are found. This element, which Western authors have always insisted on considering to be *the* element of the mature Chou art, has therefore to be carried back a considerable distance in time: whenever one finds on a ritual vessel a real, vigorous t'ao-t'ie — if it is not the modified Huai style t'ao-t'ie, to which we shall revert below — one can always be certain that the vessel is anterior to about 950 B. C.

The protruding, free-sculptured animal's head, closely akin to the t'ao-t'ie, does not disappear but is subjected to a curious change in position (we disregard here its position on the handles and on the upper part of Ting legs, which occurs all through the four styles). In Yin and Yin-Chou it is placed in the middle of the neck or in the middle of the body (belly) but never at the base; in Middle Chou it is frequent at the top of small Kuei feet, or marks the place where such should be, but it very rarely is seen higher up on the body.

If the number of animals have thus been greatly reduced in the Middle Chou decoration, the same is also the case with the geometrical patterns. A whole series of the most popular elements of this kind belonging to the Yin and Yin-Chou art is ruthlessly abandoned. Thus, the »compound lozenge» pattern (*32*) and the »interlocked T's» pattern (*33*), the »circle band» (*34*), the »whorl circle» (*35*), the »vertical ribs» (*36*), the »T scores» (*37*) and the »square with crescents» (*38*).

Especially important is the abolition of the spiral patterns (*29*). Abolition is not the proper word; we should say the reduction in the use of this element. It is a highly curious phenomenon that this pattern, or rather this group of kindred

patterns (cf. p. 92 above), which were ubiquitous in the Yin and Yin-Chou art, are now, without disappearing entirely, relegated to the handles of the vessels (Pl. XL: B 132) and play a very modest part in the décor.

However, also in the matter of decoration the new style has not only discarded, it has also created. There is a whole series of new decorative elements which are introduced and enjoy a high degree of popularity. Some of them are entirely new, others are fresh modulations and fresh applications of earlier existing elements.

First of all there is the scale motif. The simple scales filling the bodies of animals of the Yin and Yin-Chou (*28*) disappear together with the bulk of the fauna; instead of that, highly conventionalized scales come to form the principal decoration of a great many vessels. These scales, of several varieties, are either placed in bands (*55*, mostly horizontally) or hang in circles (*56*) round the body or the base, or point upwards round the neck or else form the rim itself. Secondly there are the godroon-like horizontal grooves (*53*), a novelty which becomes exceedingly common. In the third place there is the bold meandering line or band (*57*) which runs in big waves horizontally round the vessel. The »vertical stripe» element (*56*) is confined to the Li tripods. Last but not least, there is the broad band filled with conventionalized simple or compound figures (*58*), which is one of the salient features of this style.

In regard to the distribution of the decoration over the body, there are still many cases of vertical flanges (Pl. XXXIX: C 103) which divide the body into sections or panels; but these flanges play nothing like so prominent a part as in the preceding periods. They are mostly quite small and low, and the long, regularly segmented keel-like flanges (*13*) of Yin and Yin-Chou have disappeared. In their place a new kind of flange has been invented for the Li tripods: a long, thin, fin-like flange (*50*).

The technique of the decoration is very homogeneous: a low, flat relief. Professor Andersson has pointed out that one of the most characteristic features of the Middle Chou style is the complete abolition of the forceful, high relief: the entire décor is flat and evened down as if it had been polished and rubbed smooth. Graphically, this could be illustrated thus: whereas the Yin and Yin-Chou relief rises in a more or less rounded contour: _⌒_, the Middle Chou relief gives a square outline: _⊓_. Excrescences like the spikes (*12*) of Yin and Yin-Chou are also entirely abolished.

In the accessories to the body of the vessel there are also some radical changes. The most important is the leg of the Ting tripod. This was always straight and cylindrical in Yin and Yin-Chou (*8*); in Middle Chou it is always curved (*49*) — more or less bulbous at the top, more or less expanding at the base (see p. 117 above). The new Ting leg lives on down through Huai and Han, and becomes gradually more bulbous, more baroque. This criterion is one of the most certain for the dating of Ting vessels before or after 950. Another very important novelty is the small feet on which the great Kuei class of vessel are

frequently placed; such diminutive feet never existed earlier, and this is a reliable criterion. Further should be mentioned the horns of the animal's heads on the handles. The bottle-shaped horns (*11*) of the earlier periods now disappear; instead of which there are, as an absolute innovation, the spiral horns (*52*). The »supporting animals» (*9*) have entirely disappeared, and so have the »lid knobs» (*10*) — the top of the lid of the Kuei is always circular (Pl. XXXIX: D 28, C 103).

The Middle Chou style was the result of the widening of the sphere of Chinese civilization from the Shensi and Honan centres to large districts of China North of the Yangtsï. This fact is mirrored in the extension of the area of the new art. It was not a provincial phenomenon. On the one hand, it covered the whole ground of the earlier Yin-Chou art; on the other hand, it gained a considerably wider area than its predecessor. We find good examples of Middle Chou style in the following districts (by C, N, E etc. we shall indicate the position: Central, North, East etc. within the large modern provinces of the capitals of the feudal states):

Shantung: Han[1] (E); Ts'i, Ki (NC); Shï (S); Tseng, Sie, Lu (SW); Kao, Chu[4] (W);
Shansi: Tsin, Yü (S);
Shensi: Shao, K'un-i, Kuo (W); Pi (C); Juei (EC);
Honan: Chou, Mao, Tan (NW); Wei, Su, Kuo (N); Ying (WC); Hi, Cheng (C); K'i (NE); Ch'en (EC);
Hupei: Teng (N); Ch'u (C).

There is a fact which may or may not be of importance: in our material, there are no clear Middle Chou specimens from certain states which, as we shall see below, are well represented in the Huai style:

Shantung: Chu[1] (S, the Southernmost part of Yen-chou-fu);
Honan: Sung (E, Kuei-tê-fu); Ts'ai (SE, Ju-ning-fu);
Anhuei: Sü (N, Sü-chou-fu);
Kiangsu: Wu (S, Su-chou-fu, Ch'ang-chou-fu).

There seems to have been an Eastern states region, comprising Kiangsu, Anhuei, Easternmost Honan and Southernmost Shantung, which was never conquered by the Middle Chou style; and in that very region was one of the strongest centres of the Huai style — the Huai river valley is the heart of the region in question. This observation is given for what it may be worth: conclusions from negative evidence (the lack of Middle Chou specimens from this region in our lists above) are always very risky.

Another caution has to be clearly expressed: though we have given just now a table of the states from which we have positive examples of Middle Chou style, the purport of the table should not be misunderstood; it does not pretend to give a definite and reliable map of the area of the Middle Chou style. In

some cases a state in the table is represented only by one or two vessels, whereas others have a long series; it is difficult to tell how far the Middle Chou style had gained a real foot-hold in the peripheral states, such as Ch'u, Tsin, Ts'i: the data furnished by inscribed vessels are really not sufficient to admit of a statistical computation. We have to be satisfied with the fact that we have positive examples not only from the primary states of the Chou confederacy (the Chung-kuo »Central states», Chou, Kuo, Cheng, Wei, Lu etc.) but also from the regions more distant from Royal Chou.

While we can thus form at least a fairly good idea of the geographical extension of the Middle Chou style, and find that it was not a provincial phenomenon but concerned, besides Royal Chou, large tracts in a greater China North of the Yangtsi-kiang, we are on the other hand entirely at a loss to determine a lower chronological limit for it. This question we shall discuss in connection with the Huai style.

A final word before we leave the subject of the Middle Chou style. The fundamental contrast between the Yin (Yin-Chou) style and the Middle Chou style is such as could not be denied even by the most casual reader of this paper: it is there before our eyes, clearly readable in our illustrations. But a sceptical reader might make an objection in regard to the dating of the transition from Yin-Chou to Middle Chou. It has been determined by us at about 950 B. C., by the exclusive aid of the inscriptions. Is it not possible that we have been too bold, even though we have discarded a great many »datings» considered to be very serious *faits acquis* by earlier Chinese writers? Have we not accepted testimonies to Chao wang's reign and Mu wang's reign etc. that are in reality too frail? And, above all, when we have attributed certain inscriptions to the first half of Western Chou (1122—947) and certain others to the second half (946—771) solely on the strength of the early or late type of the handwriting, have we not then introduced a highly personal and subjective criterion? These questions may very well be raised.

Let us for the sake of argument concede the point. Let us for a moment accept that sceptical reader's negative views and see what will be the result. Say that we do not build anything upon our epigraphical division of the Western Chou vessels into two groups, one (B I) with inscriptions anterior to 947, and one (B II) with inscriptions posterior to that date. How are we then to treat the problem of the transition from Yin-Chou style to Middle Chou style? Can we then arrive at any conclusion at all as to its probable date? We think it possible to follow a different line of argument — and yet to arrive at practically the same result.

Nobody can seriously deny the fundamental fact that practically all the vessels of cat. B above can be proved at least to be of Western Chou time (1122—771) by aid of their inscriptions. In practically every group (i. e. group of vessels connected by personal names common to them all, e. g. the Shï Yung-

fu group, B 47—54, the *shan-fu* K'o group, B 87—97) there is one or several vessels which give an indication of Western Chou time: the capital Tsung Chou, the residence P'ang king, a vessel connected with the Royal house and excavated in Shensi, a vessel telling of a Royal Chou war expedition against the Huai I Barbarians (unthinkable in Eastern Chou times), and so on. If we now eliminate the inferior or badly drawn or indifferent vessels, and also a few hybrid forms, we have left 129 good vessels, which are all undoubtedly from Western Chou time and have a clear Yin-Chou or a clear Middle Chou style:

Yin-Chou style: B 1—3, 5—7, 9, 10, 12—14, 16—18, 22—26, 30—36, 38, 39, 41—45, 48—53, 55—57, 60—62, 64, 65, 67, 70, 71, 73—78, 95, 130, 153—156, 160—164, 166—168;

Middle Chou style: B 79, 81, 87—94, 96, 99—103, 106—110, 114—120, 122, 123, 131—134, 137—140, 142—145, 149—152, 170—173, 175—183.

We find that these 129 vessels of the Western Chou epoch divide themselves into two fairly equal groups: one of 70 Yin-Chou vessel, one of 59 Middle Chou vessels. Let us now, instead of examining the inscriptions of the vessels in order to arrive at a chronological division, fall back upon s t a t i s t i c a l p r o b a b i l i t y and base ourselves on the relative number of vessels in each group. We can be authorized to do so, since these 129 vessels have been found on various occasions and in various places during the lapse of centuries, and certainly give a fairly equitable and well-balanced representation of the Chinese bronze art in the centuries 1122—771.

Since all the 129 vessels fall within the period of 352 years of Western Chou and a little more than half of them have the Yin-Chou style, and a little less than half of them have the Middle Chou style, we may be allowed to surmise that the former 70 vessels must reasonably represent the first half, and slightly more, of this period, and the latter 59 vessels must represent a little less than the second half of the period. If we divide the 352 years in half, we obtain two periods of 176 years: one from 1122—947, and one from 946—771. If in our computation of statistical probability we give the Yin-Chou a slight advantage (corresponding to its slightly higher figure 70, as against 59), and estimate roughly 175—200 years for that period, and roughly 150—175 years for Middle Chou, we arrive at a Yin-Chou epoch extending from 1122 to something between 947 and 922, and a Middle Chou epoch, slightly shorter, extending from somewhere between 946 and 921 to 771 B. C. This is practically the same result as that which we obtained above in basing our thesis on epigraphical data.

If we abondon the orthodox chronology: Western Chou 1122—771 B. C., in favour of the Chu shu ki nien chronology: Western Chou 1050—771 B. C., the result of a probability computation will be that the turning-point between Yin-Chou and Middle Chou was somewhere around 900 B. C. The difference is so small that from an archæological point of view it can be disregarded.

THE HUAI STYLE.

The Huai style of art, a counterpart to the classical Yin art in beauty and force though not in variety, can be divided by analysis into three components: Middle Chou elements, Yin elements and Huai innovations.

The Middle Chou elements in Huai form an interesting chapter. In regard to the d e c o r a t i o n, the full, mature Huai art, such as we know it from a great number of fine specimens, especially in Umehara III, Eumorfopoulos I, Senoku, Teh'ou, Wuying, Kümmel's Chinesische Kunst and BMFEA VI, almost consistently rejects the standard elements of the Middle Chou style[1]): the scale band (*55*), the vertical scales (*56*), the wavy line (*57*) the broad-figured band (*58*). The Middle Chou elements which do appear in the Huai style are almost exclusively certain particular t y p e s o f v e s s e l. Such are the Chung bell (*43*), the Fu tray (*45*), the Ih »sauce-boat» (*46*), and the Ting with the curved legs (*49*). This, however, constitutes a very strong and important legacy from the Middle Chou to the Huai, for these types of vessel really form the great standard types of the latter art, as far as the ritual bronzes are concerned (Pl. LV—LVIII). In regard to types of vessel, Huai has not revived a single one of those Yin (Yin-Chou) forms which in the 10th century became obsolete through the victory of the Middle Chou style (*1—7*).

The Yin (Yin-Chou) elements which were revived in Huai and enjoyed a new era of success, are almost entirely décor motifs. A whole series of the most beloved Yin features here reappear, though often in a somewhat modified form.

Among these Yin style elements should first be mentioned the t'ao-t'ie (*15*), which is now taken up again in a slightly altered form (Umehara 167, 197—199, 202). The snake (*22*) is a very common feature (Pl. LV: C 98); the scaled animal (*28*, Pl. LV: C 98) and the free animal's head (*14*, Pl. LIII: D 30) less so. The rising blade (*24*) and the hanging blade (*25*) (Pl. LVIII: C 145; LII: C 183) revert, but now often take on some peculiar forms: either heart-shaped (Pl. LVI: D 43; LVIII: C 182, Umehara 177, 184, 189) or strictly triangular (Pl. LVII: C 35, C 120, Umehara 181, 184, 185, 187, 188). The whorl circle (*35*) is again a highly prominent feature, often more or less dissolved (Pl. LV: C 98, Umehara 166, 199, 209), and the interlocked T's pattern (*33*) becomes one of the standard features of Huai art (Umehara 176); it is particularly important on Huai style mirrors (Exhibition of Early Chinese Bronzes Pl. XVII: 2). Finally the spiral filling (*29*) is revived: it now recurs in a strictly square, tightly condensed pattern, which fills up particularly large square surfaces on the sides of bells and also on the top surfaces and sometimes the handles of bells (LVIII: C 182, C 124).

The original Huai innovations are numerous and radical. In regard to types of vessel the most important is the change which the Ting — the lion among archaic Chinese vessels — has undergone. It has become squat: very broad and

[1]) For hybrid vessels see p. 152 below.

low, heavy, with curved legs even more baroque than in the Middle Chou style; The handles are now mostly of the »bent ear» (*39*) type first created in Yin-Chou time (Pl. LVI: C 126, Umehara 179, 181, 183). This Ting type lives on down through the Han epoch. The rings standing on the lid are another very striking novelty (Pl. LIV: C 147, Umehara 179, 182, 183, 189).

In the decoration there is a whole array of new elements which combine to give the impression of an entirely new art. There is first the »interlacery» element (*61*), which term indeed includes a whole class of kindred phenomena, as described on p. 130 above. Even if this element can be considered to be not wholly foreign to the earlier art of China — some of the earlier variants of dragons' and snakes' bodies suggest the beginning of the »interlacery» idea — the equally important new element »hooks and volutes» (*62*) is an entirely new departure, which had no roots whatever in the Yin (Yin-Chou) or Middle Chou arts. The same is true of three other important features of the Huai decoration: the plait pattern (*63*), the rope pattern (*64*) and the dot filling (*67*). The »wart» element (*66*) seems to have grown out of the raising of the eyes of dragons and birds into »studs», which is akin to a similar raising of the eyes of the t'ao-t'ie in older times. And the spiral circle (*68*) is at least akin to the whorl circle of Yin and Yin-Chou.

The various geometrical patterns which are new features of the Huai style (*69*) form such a complicated chapter that we shall not enter upon it here. A fuller discussion of it will be found in a paper by Professor J. G. Andersson.

Our localizable inscribed vessels with a pure and undeniable Huai style are so few that we cannot draw any definite conclusions from them as to the geographical origin and principal centre or centres of this art. Here, as in regard to the Middle Chou style, we had better be satisfied with stating that we have positive examples from the following regions:

Hopei: Yen (N);
Shantung: Ts'i (NC); Chu[1] (S);
Shansi: Lü (S);
Shensi: Ts'in;
Honan: Han[2] (NW); Hü (C, later SW); Ch'en (EC); Sung (E); Ts'ai (SE);
Hupei: Ch'u (C, later Honan, Anhuei);
Anhuei: Ch'u (NW, earlier Hupei); Sü (N);
Kiangsu: Wu (S).

Besides these there are hybrid vessels, with a mixture of Middle Chou and Huai, in:

Shantung: Lu, Tseng (SW);
Honan: Wei, Su (N); Cheng (C); Jo (SW).

To these localities as places of origin of Huai style vessels can be added two more. On the one hand, Northernmost Shansi, where the famous Li-yü find (of

unknown date, yet from Chou time, as attested by the script form of the inscribed sword) yielded rich Huai specimens. On the other hand, the state of Cheng (Central Honan), where the Sin-Cheng find produced a rich crop of vessels, some of which are of definitely Middle Chou style, but others of equally definitely Huai style.[1])

Thus we find that there is an even more extensive area for the Huai style than for the Middle Chou style: it is not limited to the Yangtsï valley and the Huai valley, nor to these and Shantung (Ts'i). It is attested by good Chou-time inscribed vessels from the most varying parts of the whole of China North of the Yangtsï.

The question, then, is this: when and how did the Huai style conquer China and oust the Middle Chou style?

We have seen above that the Middle Chou style ousted the Yin-Chou style somewhat abruptly around 950 B. C.; it utterly rejected a whole series of the most important elements of that art and introduced an array of entirely new elements. The change was sudden and complete; the »mixed» vessels, presenting both Yin criteria (1—38) and Middle Chou criteria (43—59)[2]) are indeed so rare as to be practically negligible. There was apparently no »transitional stage» between Yin-Chou and Middle Chou, no gradual evolution with a slow infiltering of new elements and a slow dying off of the old elements. There was a radical change, a new departure in the middle of the 10th century. During the second half of Western Chou (the period 946—771) the Middle Chou style reigned supreme; there is hardly the slightest symptom to be observed of any nascent Huai-style art during that period.

On the other hand, the Huai style is attested by a series of reliable examples in the 6th century and the first decades of the 5th B. C. At that time we find it not only in Ch'u but in various places all over China: Ch'u in Hupei C (vessel C 35 of the 6th century); Wu in Kiangsu S (vessel C 183 made by a prince dead in 473 B. C.); Sü in Anhuei N (vessels C 128, 129, not later than 512 B. C.); Chu[1] in Shantung S (vessel C 25 made by a prince who died in 556 B. C.); Ts'i in Chantung NC (vessel C 145 made by a prince who died in 554 B. C.); Sung in Honan E (vessel C 124 made by a prince who died in 532 B. C.); Ch'en in Honan EC (vessel C 2, not later than 478 B. C.); Ts'in in Shensi (vessels C 175, 176 not later than 577 B. C.); and finally — most striking of all — in the very precincts of Royal Chou (or, if the first informations giving Kung-hien as the place of discovery are right, quite close to the Royal domain) (Piao bells, C 41, dated 550 B. C.). There

[1]) It is safest not to attempt to fix any definite date for the Sin-Cheng vessels; Wang Kuo-wei may be right as to the date *circa* 575 B. C. of C 36, but it does not follow that this can be used as a decisive *point d'appui* for the rest of the vessels. It may have been a cache where vessels of different epochs were hidden.

[2]) Crit. 39, 41, 42, Yin-Chou innovations which lived on through Middle Chou, are not considered here.

is therefore no risk in stating that in the middle of the 6th century the Huai art had victoriously penetrated to all parts of the China of those days.

Was the change from Middle Chou to Huai as sudden and complete as that from Yin-Chou to Middle Chou in the 10th century? In all probability it was not.

In principle there should be two means of studying this question: the inscriptions and the stylistic transitional stages. The first leaves us stranded. We have a great number of vessels in Middle Chou style for which we can decide a *terminus ante quem* (see category C above); yet we have no clear Middle Chou vessels which are definitely datable in or after the 6th century. This might seem to fit in splendidly: why not conclude that the Huai style had gained a complete victory during that century, and that all pure Middle Chou vessels have to be placed anterior to 600? That is tempting, but it would be to conclude more than the premisses allow; for conclusions *e silentio* are always risky, and especially so when, as here, the datable inscriptions are extremely few.

Let us therefore try the other road and examine the evolution of style itself. We at once find that the change from Middle Chou to Huai was of a different character from the sudden change from Yin-Chou to Middle Chou in the 10th century.

On the one hand, we have a considerable number of vessels which are in the main Middle Chou and yet show some indications of Huai ideas, small details of the Huai style breaking through their Middle Chou decorative scheme. Such are: C 16, C 17, C 39 (Pl. XLV), C 64, C 88, C 141, C 166 (Pl. XLII), C 169, C 179, D 36, D 41, E 33, E 47, E 56 (Pl. L), E 59. For the Huai elements of these Middle Chou vessels see pp. 123—129 above.

On the other hand there are not a few vessels which are principally Huai but still show considerable traces of Middle Chou: as we have seen on p. 149 above, the real mature Huai art had ruthlessly rejected the principal features of the Middle Chou décor (but not its types of vessel) and had created its own decorative scheme, partly by aid of revived Yin elements, partly by innovations of its own; yet we have here examples of Huai vessels in which the Middle Chou décor none the less peeps through. Such are: C 31, C 46, C 47, C 120 (Pl. LVII), C 126 (Pl. LVI), C 152 (Pl. LIV), C 171, C 176, D 18. For the Middle Chou elements of these Huai vessels see pp. 132—134 above. Among uninscribed hybrid vessels we might mention the Hu flask Wuying 118, which is in the main a typical and fine Huai vessel, but which none the less has a modest row of Middle Chou scales on the handle. Tch'ou XXV has a bell on which the Middle Chou figured band (*58*) has been adopted but remodeled into a snake pattern. Umehara III: 174 has a Huai bowl with a narrow *57* wavy line.

Sometimes it is difficult to decide whether we should define a vessel as Middle Chou with incipient Huai elements or Huai with lingering Middle Chou elements. There is for instance the beautiful little Kuei-shaped vessel belonging to the Museum of Far Eastern Antiquities and reproduced in Kümmel, Chinesische Kunst (Pl. 42). It has the shape and grooves (*53*) of a Middle Chou vessel, but the rings

standing on the lid (*65*) denoting a Huai vessel; its patina places it in the Huai group, and here is an example of Middle Chou influence — generally Huai does not work with the groove element.

We have spoken of »Middle Chou with incipient Huai elements» and »Huai with lingering Middle Chou elements» and thereby indicated that we conceive of the evolution as being a gradual organic transition from Middle Chou to Huai, in contradistinction to the more sudden change from Yin-Chou into Middle Chou. Yet we might ask: is it not possible to imagine things differently? Since Huai has such a remarkable series of décor elements in common with the Yin style and generally spurns those of Middle Chou, could we not suppose that Huai and Middle Chou were parallel stages, two diverging evolutions from the Yin art? If Middle Chou had its region of birth and great efflorescence in Royal Chou (from circa 950 B. C.), Huai might simultaneously have been created in the Yangtsï and Huai valleys, taking its inheritance directly from Yin.[1])

And then the two styles might have come into contact with one another and, to some extent, influenced each other, thus creating the vessels just discussed as a kind of hybrid products of two independent and parallel arts — until the time when Huai was victorious and ousted the Middle Chou style entirely throughout China.

If we reject this mode of interpretation — which would undoubtedly possess some historical advantages[1]) — we do so for several reasons.

On the one hand, there are some interesting cases in which we can seize the evolution from Middle Chou into Huai as it were in the process. There are the two vessels belonging to Mrs. Sedgwick, one P'an (Pl. XLIV: C 40) and one Ih (Pl. XLV: C 39) with the same inscription and obviously made by the same artist. The inscription locates the vessels in the state of Ch'u (Hupei C, later Honan and Anhuei). The P'an is in pure Middle Chou style; the Ih is mainly Middle Chou, but the »figured band» (*58*) of Middle Chou begins to have its figures »Huai-icized»: small birds' heads at the end of the flourishes. Here we can grasp the Huai art in its nascency, on the soil of one of its principal strong-holds, the Ch'u state, and witness how in that very region a real Middle Chou art very insidiously (in the products of one artist!) creeps over into Huai.[2])

Again there is an interesting example from the state of Ts'i. In Ts'i (Shan-

[1]) The traditions of Yin were kept up during many centuries of Chou rule in the state of Sung (Honan E), where the princes continued to make sacrifices to the *manes* of the Yin kings. From Sung our material includes no Middle Chou vessels, only Huai vessels.

[2]) It is very difficult, on the other hand, to account for the series C 34 of bells all of which bear one and the same inscription, indicating equally the Ch'u state, and which are almost too divergent from one another in style. Some of them, those in the Sumitomo collection (Senoku Betsu 5—7, our Pl. XLVIII) and in the Tuan Fang collection (T'ao 1: 17, our Pl. LI) exhibit nothing that is not good Middle Chou; one of them (Tch'ou XXII, our Pl. LV) is in pure Huai style. It is difficult to imagine that one and the same artist made a series of bells with identical inscriptions and yet in so totally different styles.

tung NC), as we have seen, the Huai style existed already in the 6th century, and Ts'i was one of the most flourishing centres of Huai art. And yet in the vessel C 166 (our Pl. XLII), which is dated as late as 371 B. C., we have a specimen that is a mixture of Middle Chou and Huai: the vessel itself is good Middle Chou, but the handles are very baroque Huai handles; and this vessel has sister vessels with the same inscription (C 167, C 167 a) of which one has the standing rings that are typical of Huai. Obviously C 166 is a belated example of Middle Chou style in a state where Middle Chou was first quite flourishing (C 154, C 155, C 160, C 163, C 164) but from the 6th century and onwards was gradually superseded by Huai art. One and the same artist seems to have made the »mixed» vessel C 166 and the Huai vessel C 167 a.

But the weightiest argument against a theory that Huai was an independent derivative from Yin and was collateral with Middle Chou before it finally ousted it is the very nature of the Huai style itself. It is true that its decorative features are Yin elements (not Middle Chou elements) with a rich addition of entirely new features of its own; but it should not be forgotten that this concerns the d é c o r only; in regard to the t y p e s o f v e s s e l it is just the opposite: here we find that the Huai style has spurned the classical Yin types — the square Ting, the Li-ting, the Yu, the Ku, the Tsun, the Yi, the Tsüe, the Kuang, the ordinary Ting with cylindrical legs — and entirely followed the lead of the Middle Chou style: Chung, Fu, Ih, Sü, Ting with curved legs. This clearly shows that Huai was not collateral with Middle Chou but was its derivative; it was posterior not only to Yin (and Yin-Chou) but also to Middle Chou, and it is a typical eclectic art: it has revived a series of Yin decorative motifs, yet without accepting its types of vessel; it took over the principal types of vessel of Middle Chou yet without accepting its principal decorative elements; and it added an important series of new features of its own.

Our conclusion therefore must be that the Middle Chou style, which reighed supreme during the second half of Western Chou (946—771 B. C.), in Eastern Chou time (770—256) very soon began to undergo certain modifications, due to influences of the origin of which we can know nothing. After a period of transition, a new art, the Huai style, had developed by an eclectic and to a certain extent archaizing process, and the Middle Chou, lingering on in an ever more and more languishing state for centuries after its era of supremacy, and still occasionally reviving side by side with the new art, at least in certain localities (e g. Ts'i), was finally and definitely ousted by the Huai style at an epoch which the inscriptions do not allow us to fix exactly, but which must have been around 400—350 B. C.

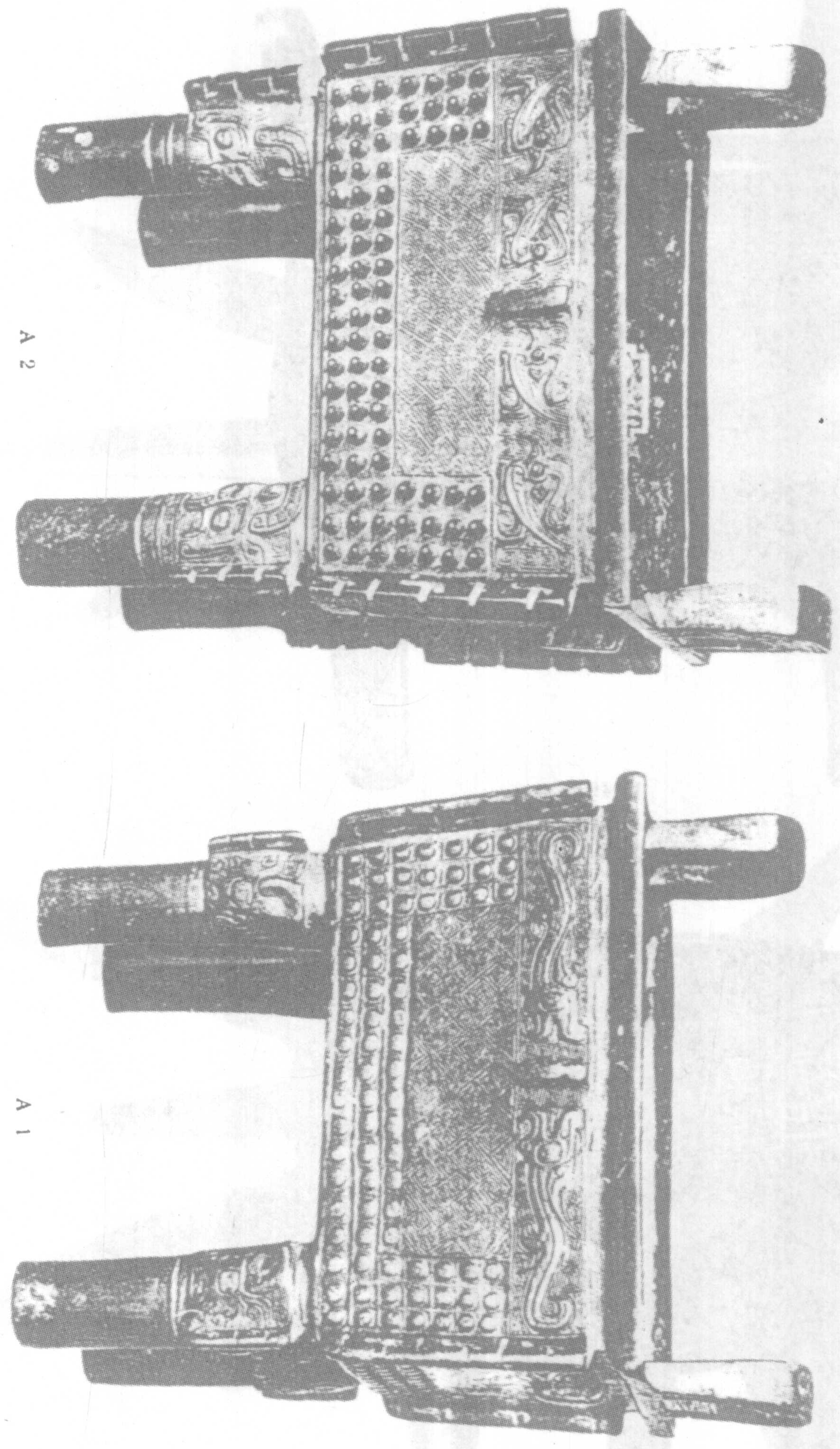
ADDITIONAL NOTE.

After the printing of this paper, the Exhibition of Chinese Art in London has offered me an opportunity of seeing some of the Imperial collection vessels which I had earlier seen only in photograph or drawing, and a few of them call for some remarks.

The Hu flask C 32 (our Pl. XXXV), the inscription of which is reproduced by Lo Chen-yü in his Corpus of inscriptions (Chengsung, Pu shang 37), has a surface, colour and patina which make it very difficult to accept it as genuine.

The vessel C 140 (our Pl. XXXV, included in Jung Keng's list of authentic vessels and in Lo Chen-yü's Chengsung 7 : 33) also makes an impression of being a later product in archaizing style: the patina is not what we are used to in archaic vessels, the relief is coarse, sharp and high-ridged and very unlike the ordinary Middle Chou relief. It has a »sister vessel», a Hu flask (not in my article above), in the same section at the Exhibition, and included in Jung Keng's album of choice pieces from the Imperial collections (Wuying p. 105), which shares in all these peculiarities, and which moreover has a peculiar décor motif: an arched line with stylized »gaping dragon» heads, pointing downwards, at the ends, which make the impression of being a misunderstood and misrepresented early design. When seeing these two vessels I could not help having serious misgivings; after prolonged study I feel very uncertain. On the one hand, the »double dragon» motif recurs in C 193 (our Pl. LI) on a similar Hu, which is illustrated in the I shu ts'ung pien, a modern publication which gives only very choice vessels. On the other hand, it seems possible that the coarse, high-ridged relief, common to both vessels, is peculiar to a particular family (provincial?) of bronzes.

Again there is the big Hu C 23 (Jung Keng's list of authentic bronzes, Lo Chen-yü's Chengsung, Pu shang 38, Wang Kuo-wei's Kin wen chu lu piao, Wu Ta-ch'eng's K'ia 14 : 16) which is somewhat disconcerting. The Imperial vessel in the Exhibition is without lid; a lid with the same inscription is in the National Museum of Stockholm. The patina of the Stockholm lid is quite different from that of the Imperial vessel. This is due to the fact that there were at least two Hu with the same inscription (see Wang Kuo-wei's Kin wen chu lu piao). The Imperial vessel has a décor element which, when examined by the eye directly, not only in photograph or drawing, looks very suspicious: a hybrid between cicada and fish, seemingly an early motif misunderstood and maltreated by a late imitator. The bronze is quite ugly in colour.



A 2 A 1

Pl. I.

About B 57 I wrote (p. 112 above): »The drawing is very unfavourable, but the vessel probably authentic». Having seen the vessel I am somewhat in doubt as to the genuineness of its handles.

C 57, a big Hu flask (Jung Keng's list of authentic vessels, Wu Ta-ch'eng's K'ia 14:15), has the same high-ridged and sharp-edged relief as C 140 above, and the whole vessel has an ugly, dirty-brownish colour which is not very convincing. The design also is uncommon, with its head with exaggerated tusks

I take the opportunity of adding a note about the Lei A 86 belonging to Professor Seligman. I have quoted it after Umehara, who has it in his standard work on selected archaic Chinese bronzes in Western collections. (Shina kodō seikwa). Professor Seligman has told me that he considers the bronze to be a later imitation. If this is confirmed, the vessel should be eliminated from my material. For our stylistic conclusions this is in no way fatal, for the existence in archaic times of this vessel type with this décor is attested by several other specimens: one in the Sumitomo collection (A 309 above), one in Liu T'i-chï's collection, Shanghai (Shan chai ki kin lu, heft 3) and one in Ts'ao Kuei's famous collection (see Huai mi shan fang ki kin t'u).

In all likelihood, a certain number of vessels in our lists A-E above shall have, after all, to be eliminated from the final and decisive material, once an opportunity has been offered to subject them all to an ocular examination. I want to emphasize that I have anticipated this on pp. 88—89 above. But I have added there (p. 89) that this negative fact does not invalidate our general conclusions, since they are built on series of vessels.



A 28 A 246

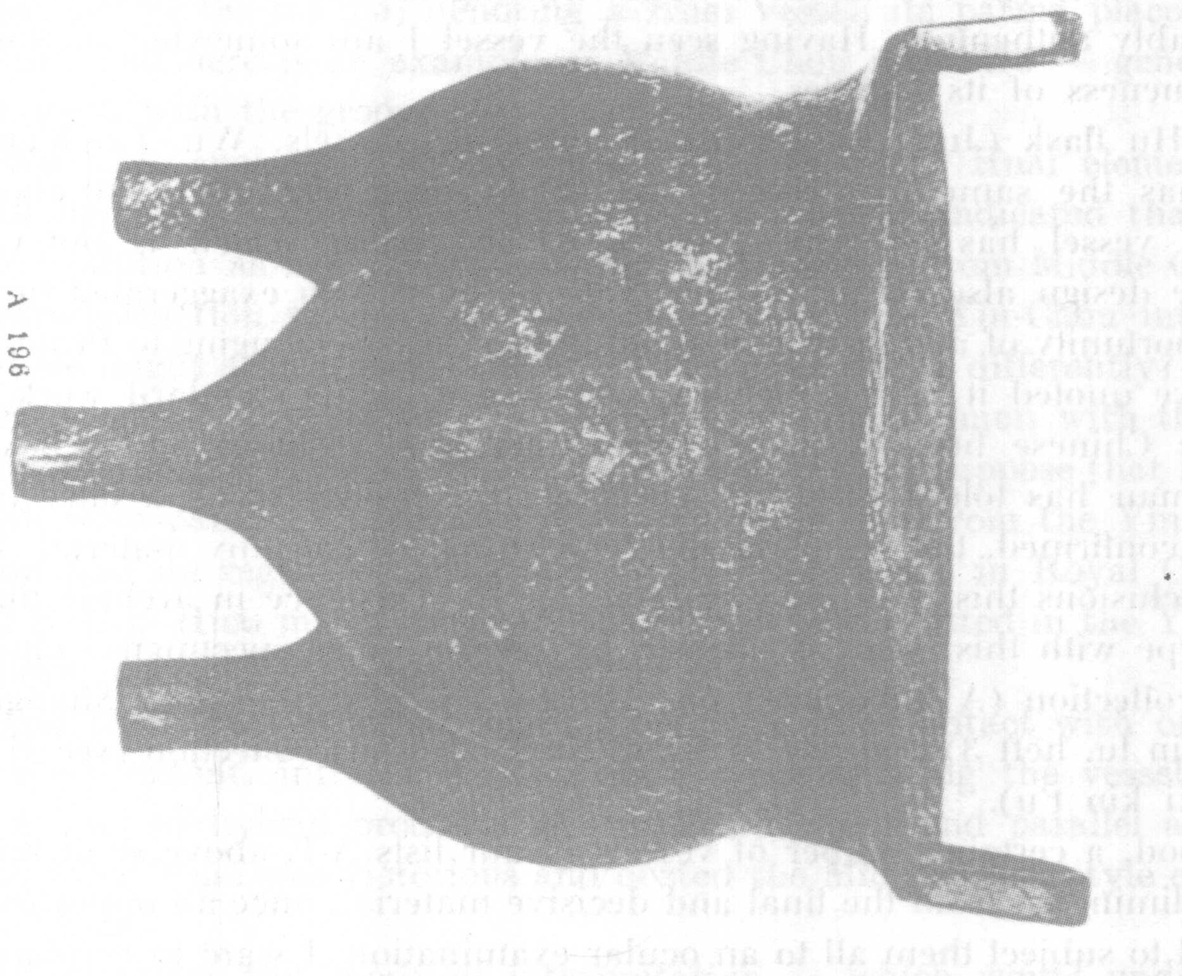
Pl. III.



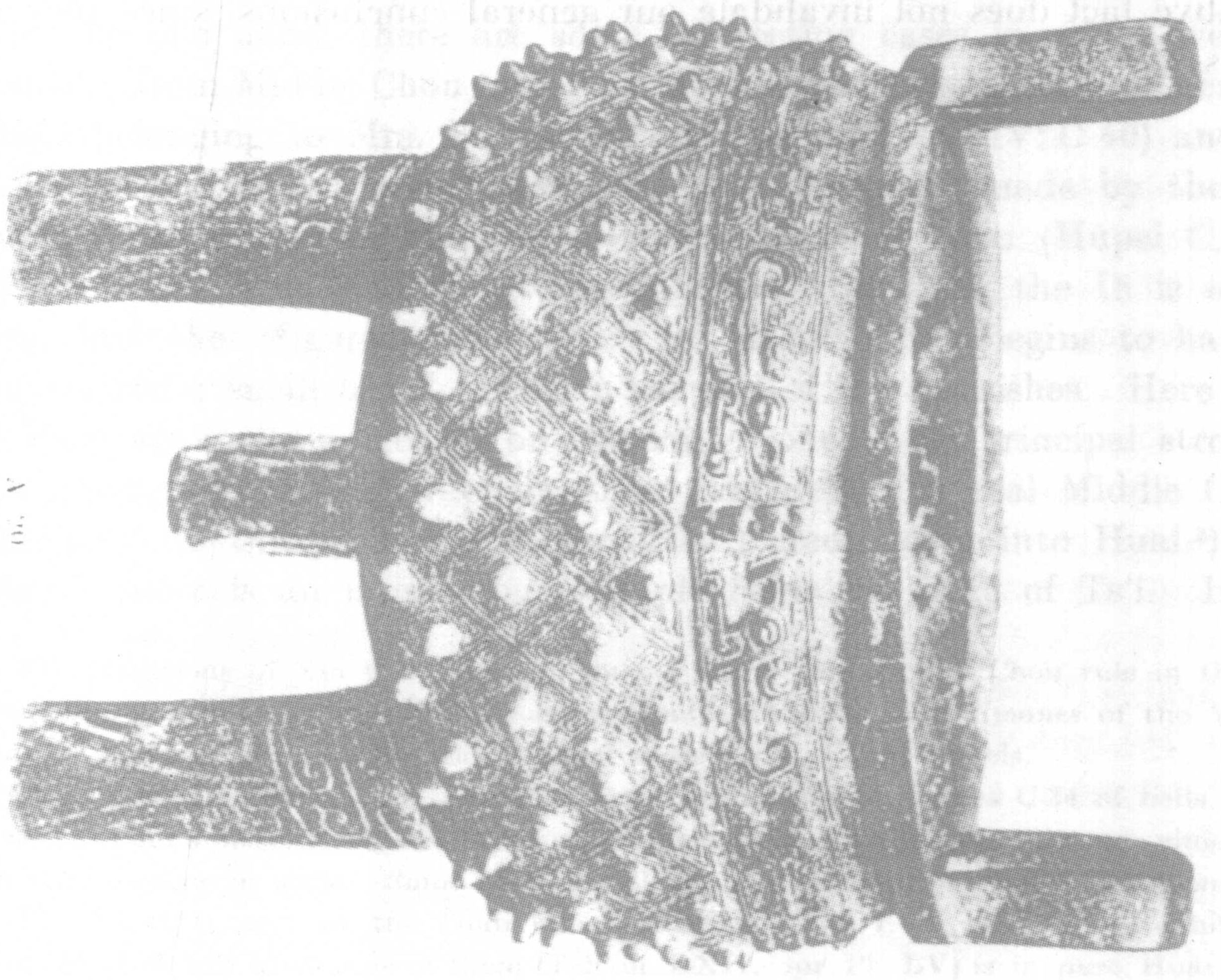
A 6

Pl. II.

Pl. V.



A 196



Pl. IV.

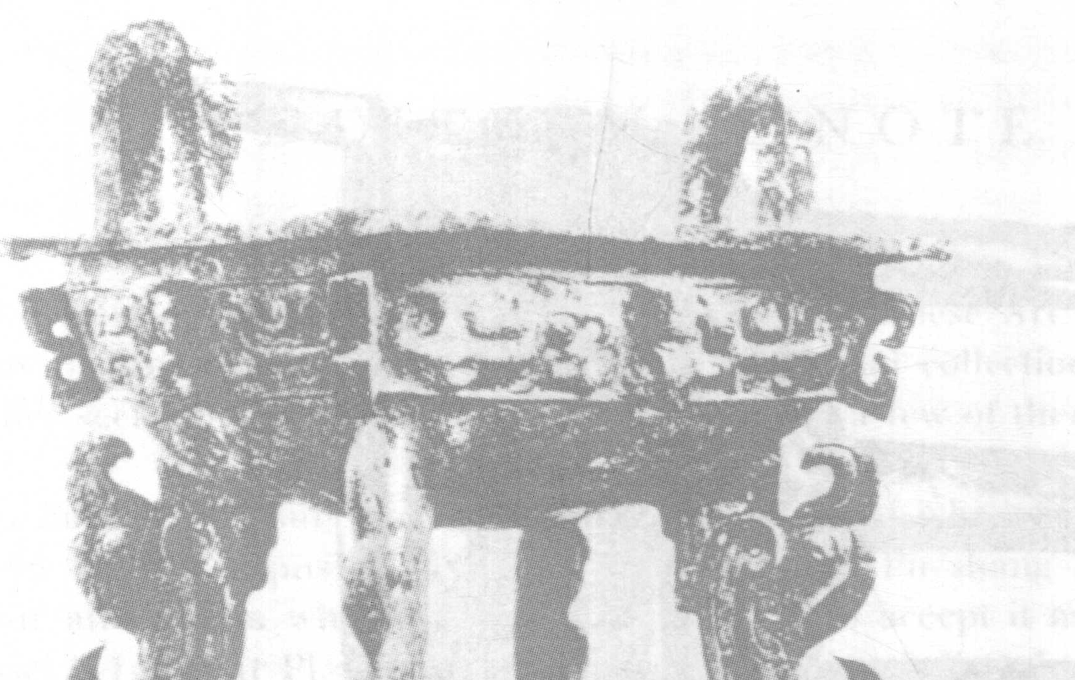


B 49



A 247

Pl. VII



A 12



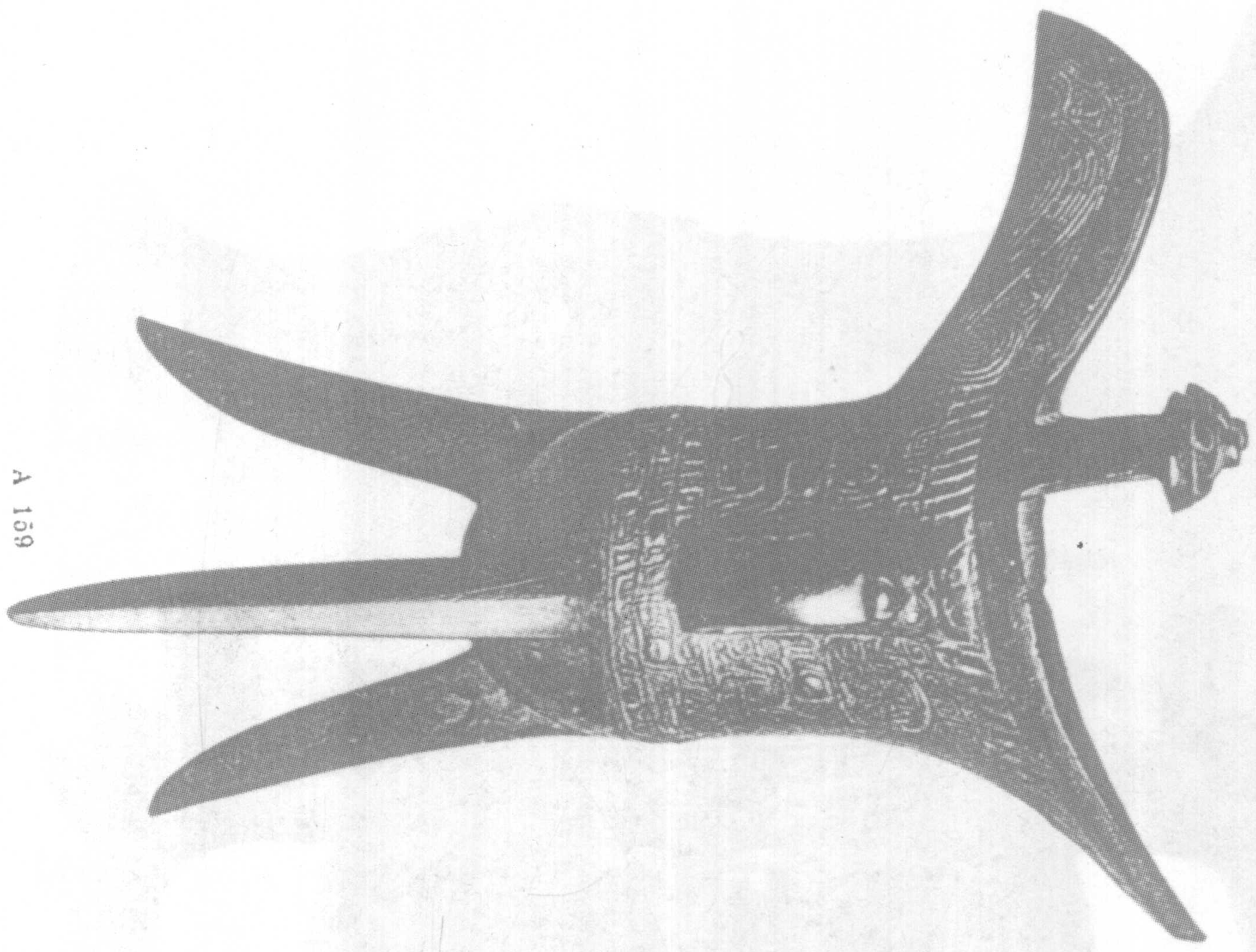
A 193

Pl. VI

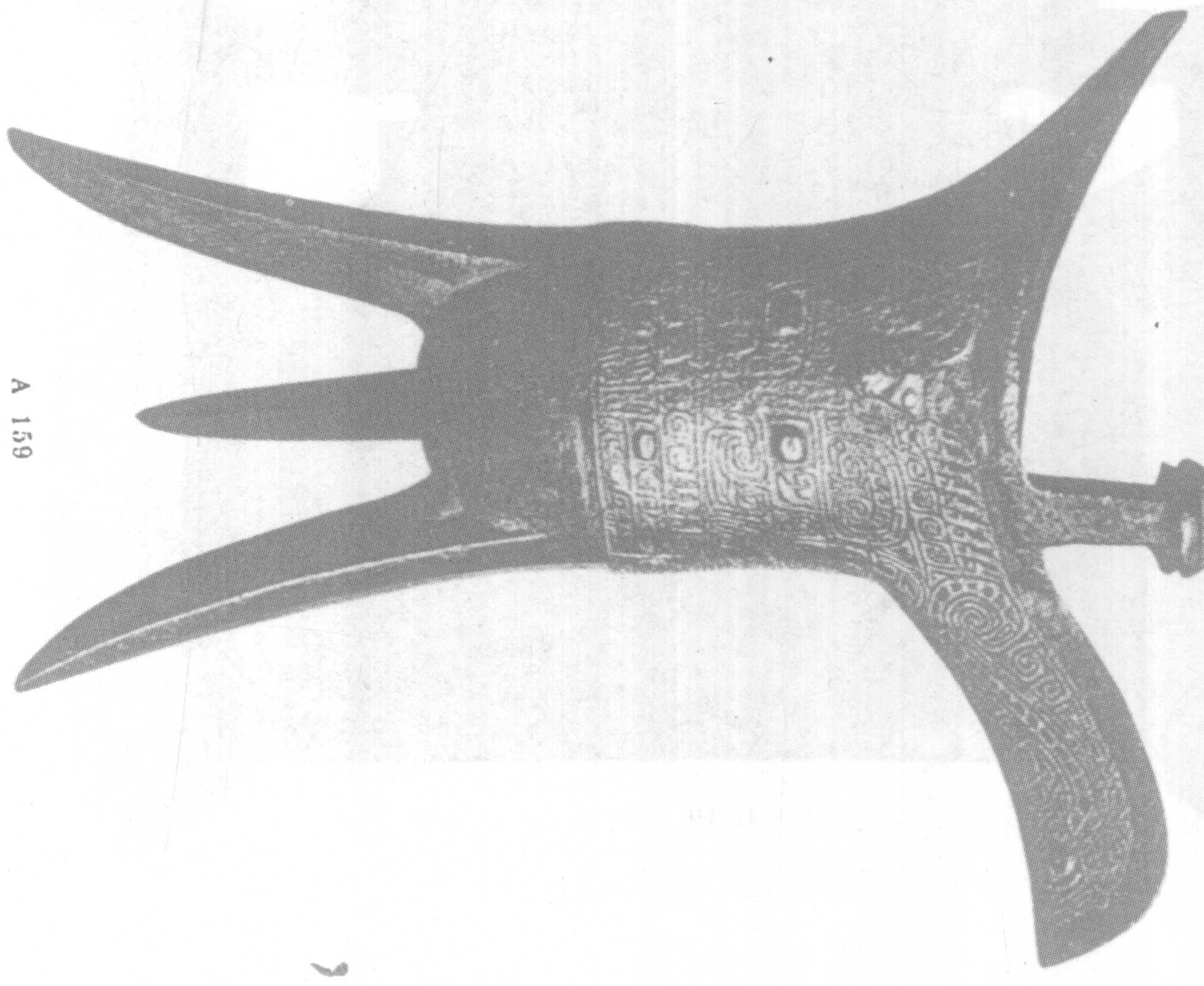


A 38

Pl. IX.



A 159



A 159

Pl. VIII.

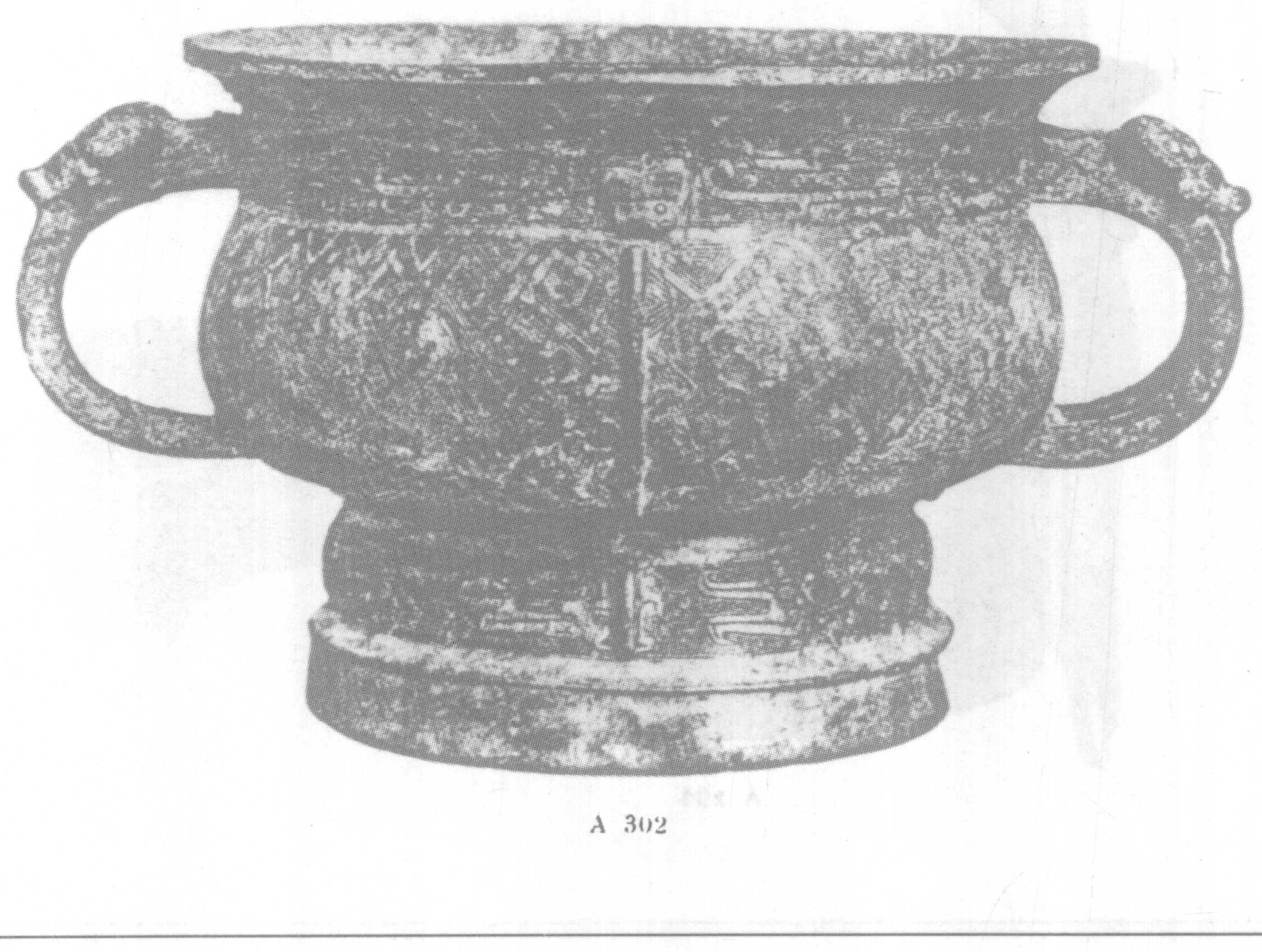


A 260

Pl. XI.

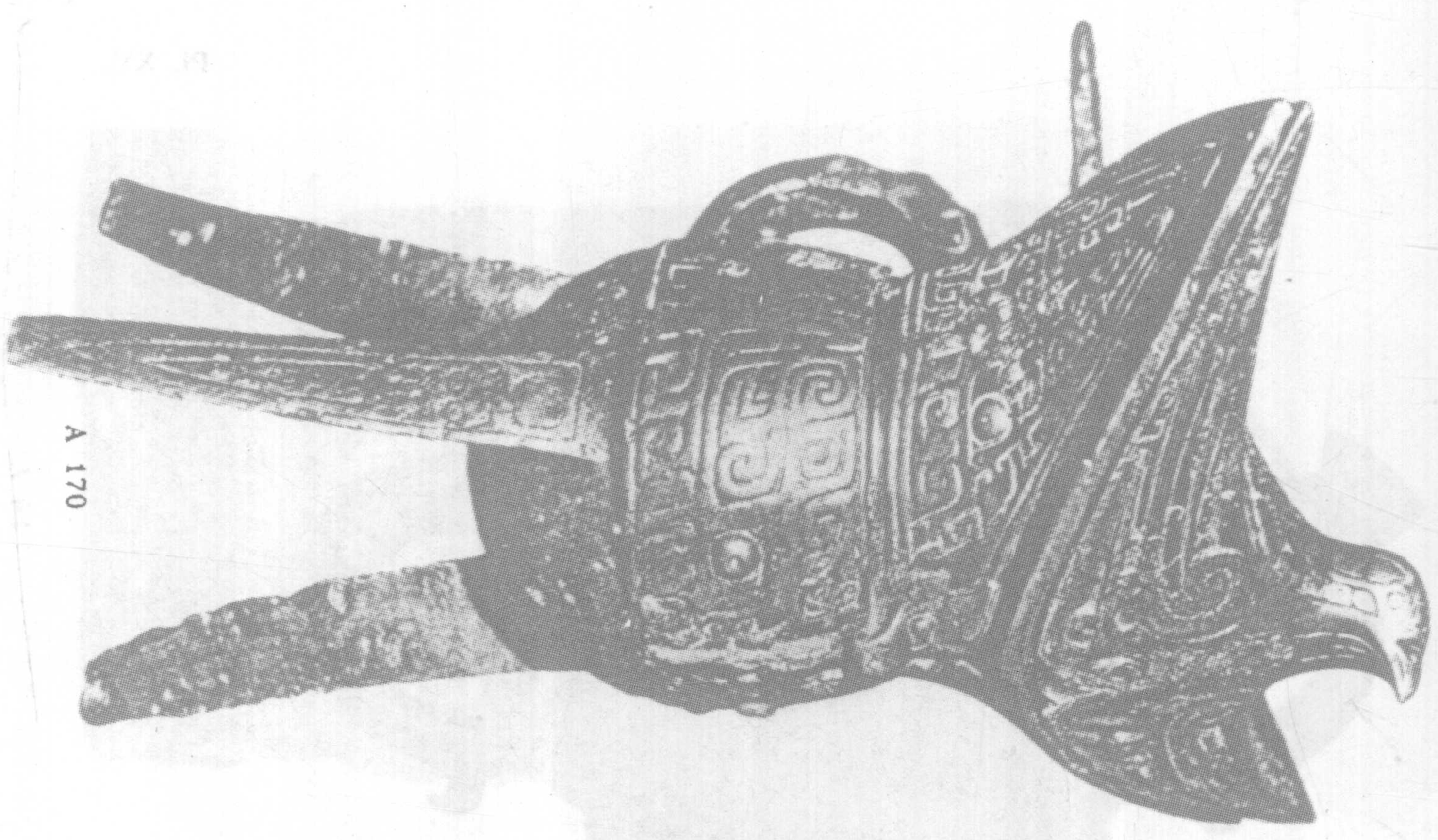


B 42

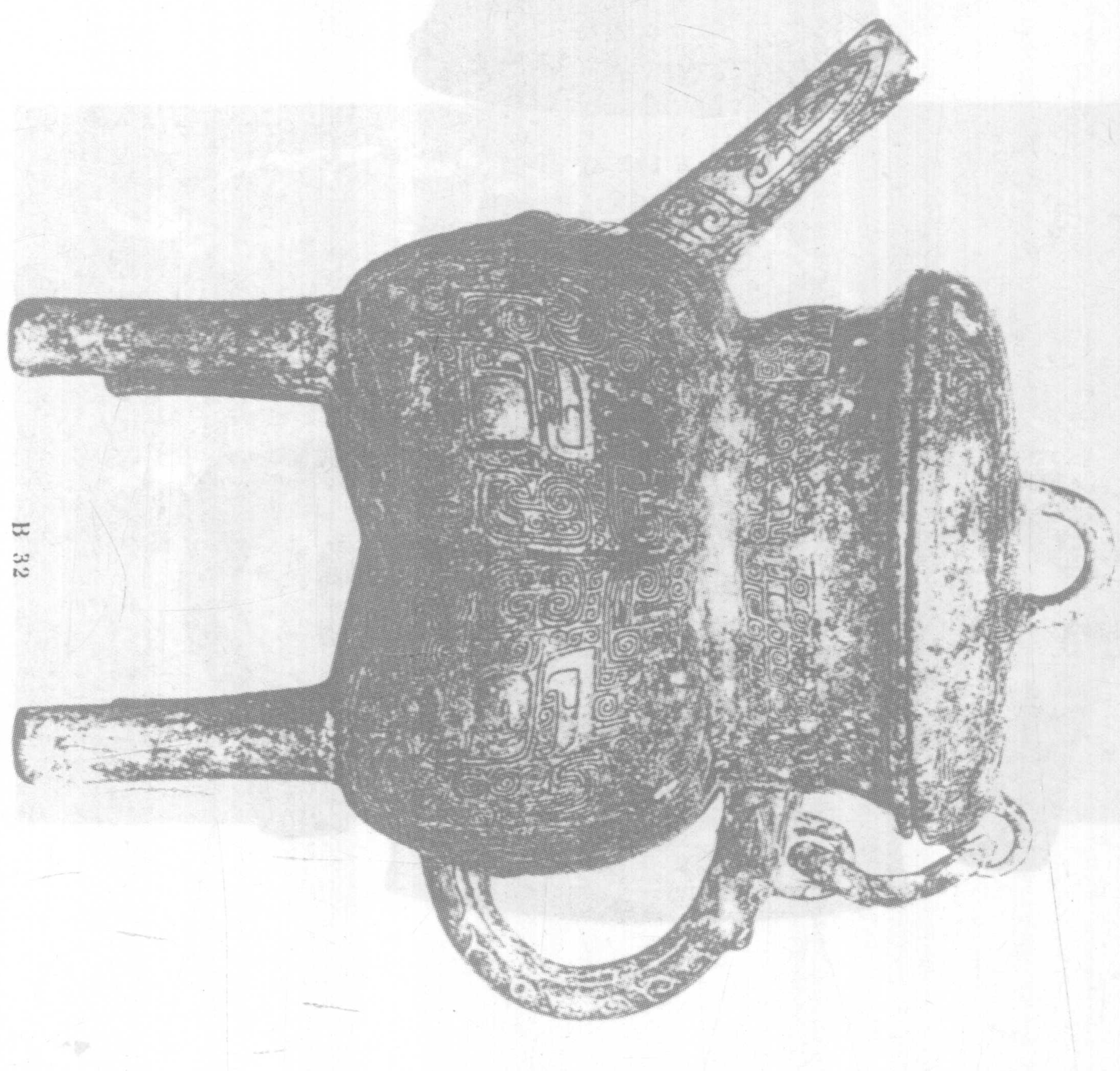


A 302

Pl. X.



A 170



B 32



A 304

PL. XIII.

Pl. XII.



E 40

Pl. XV.



A 293



B 167

Pl. XIV.

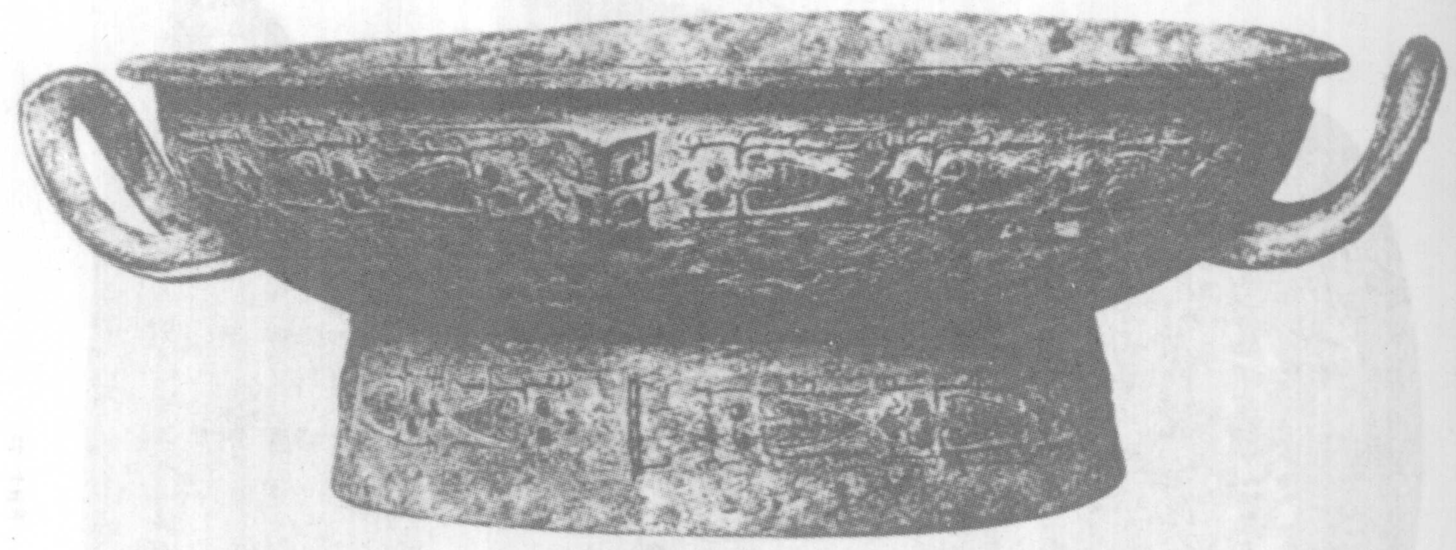


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B 41

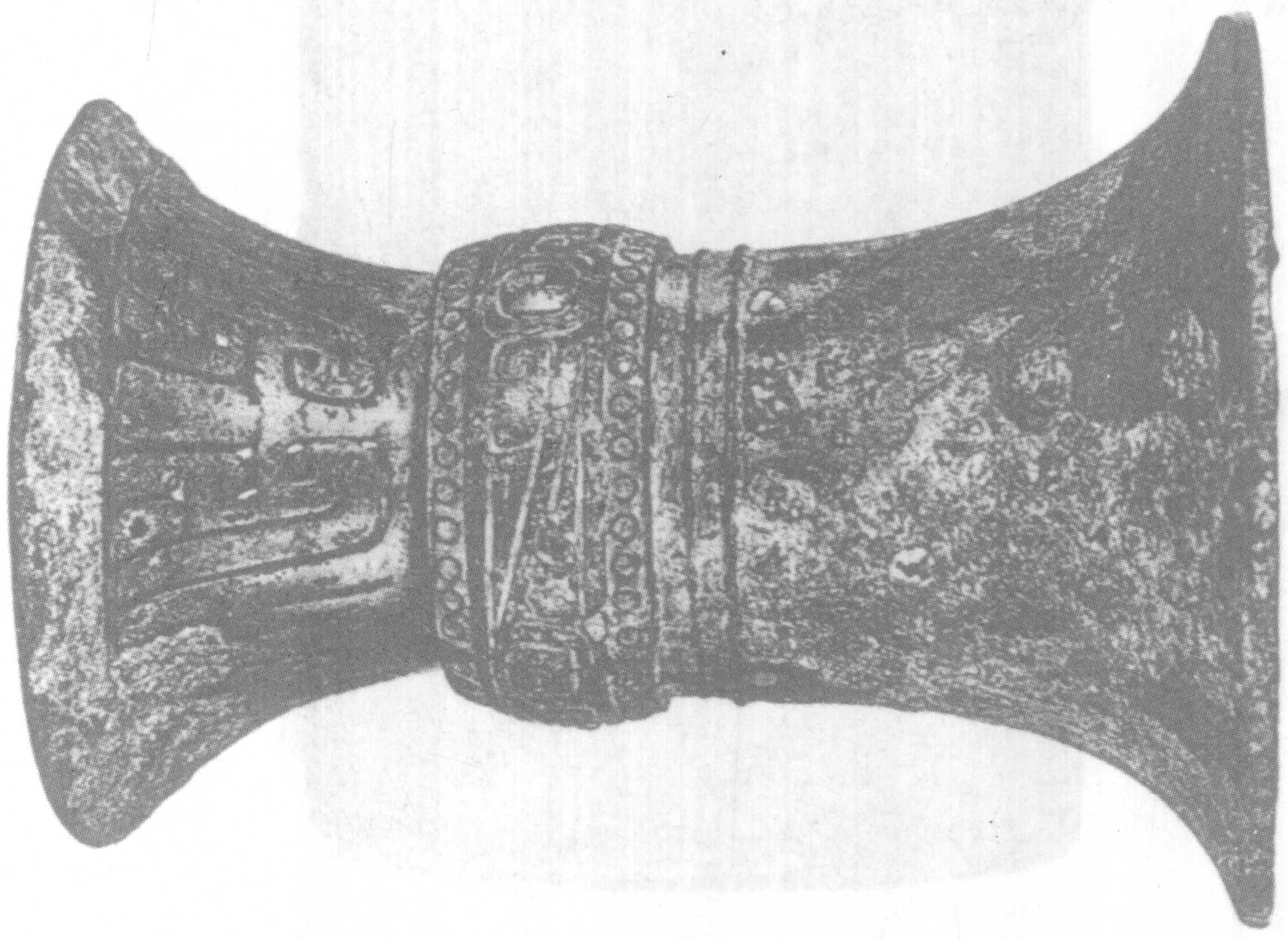


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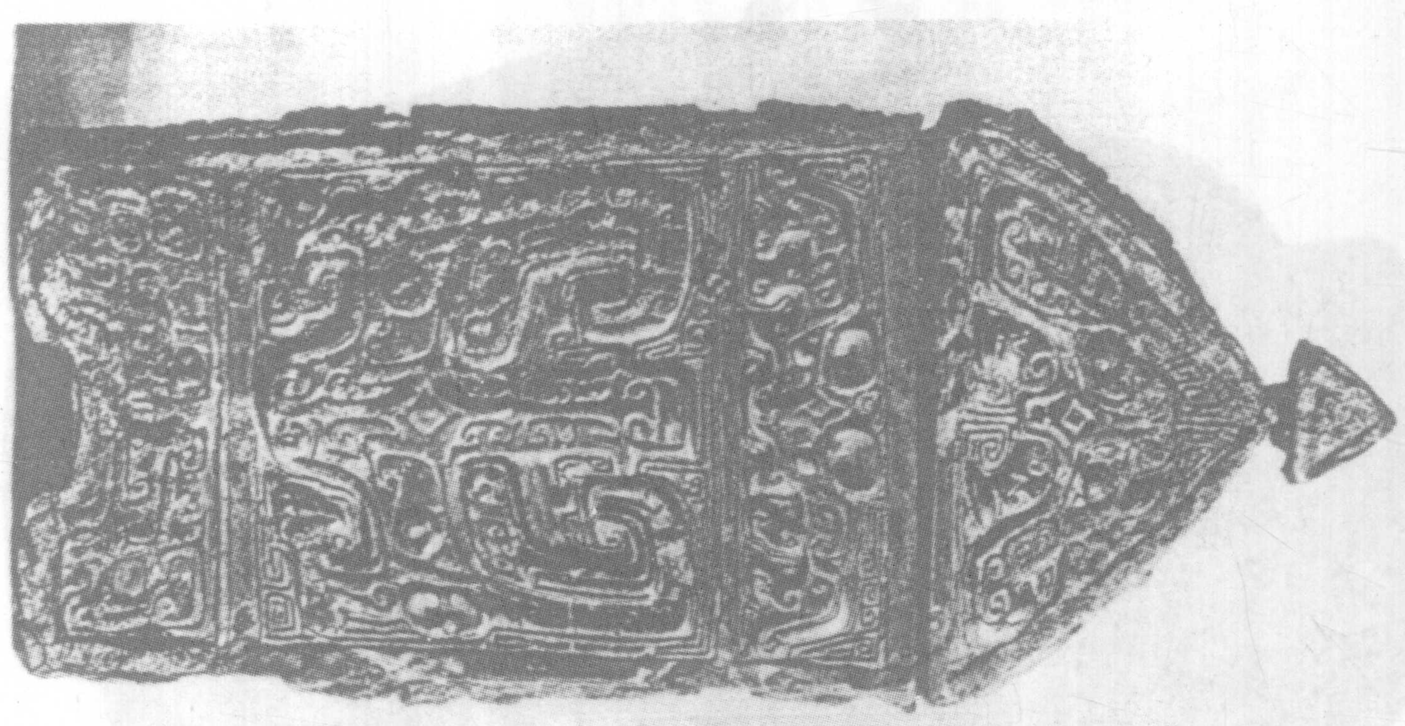


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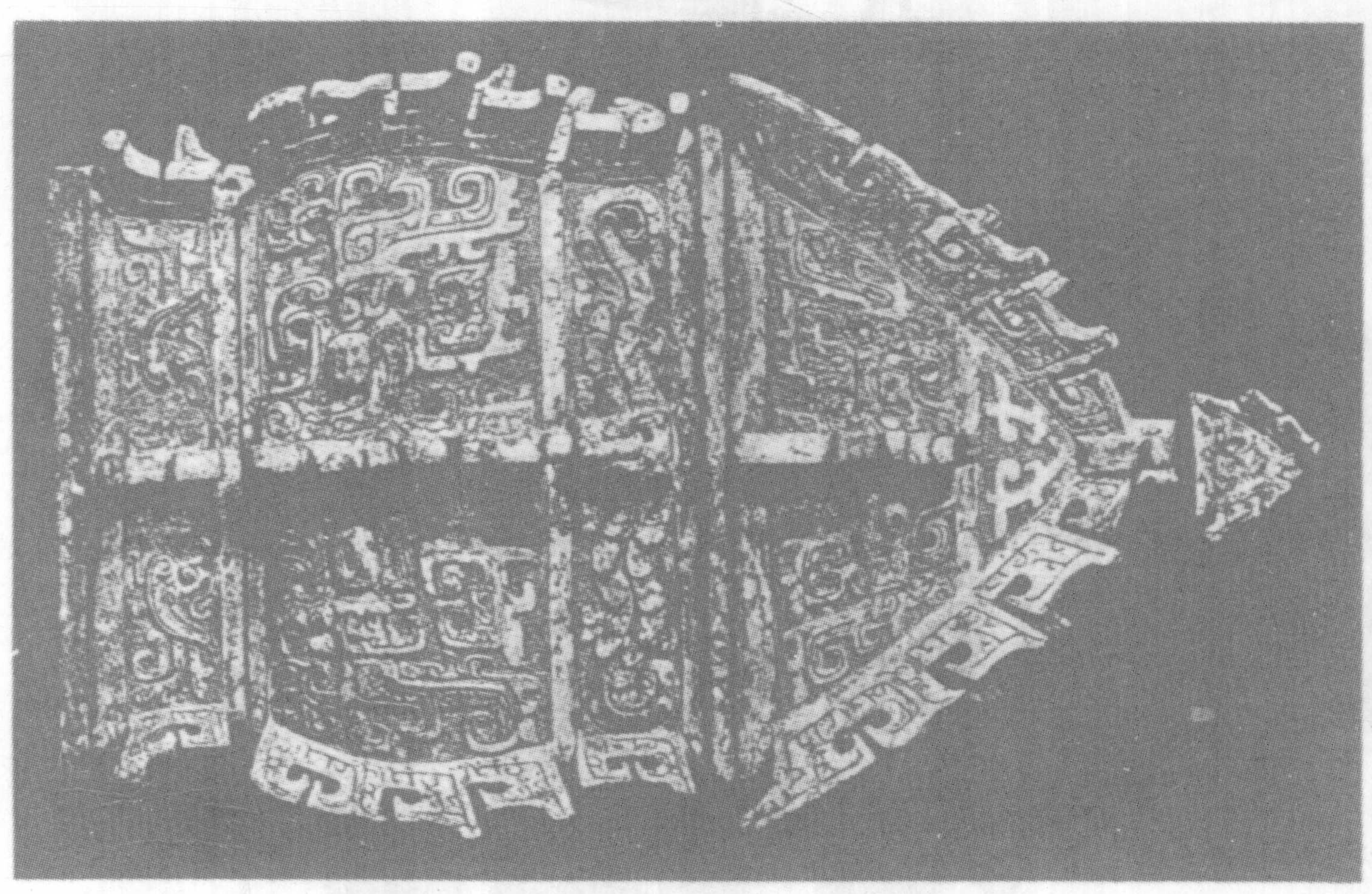


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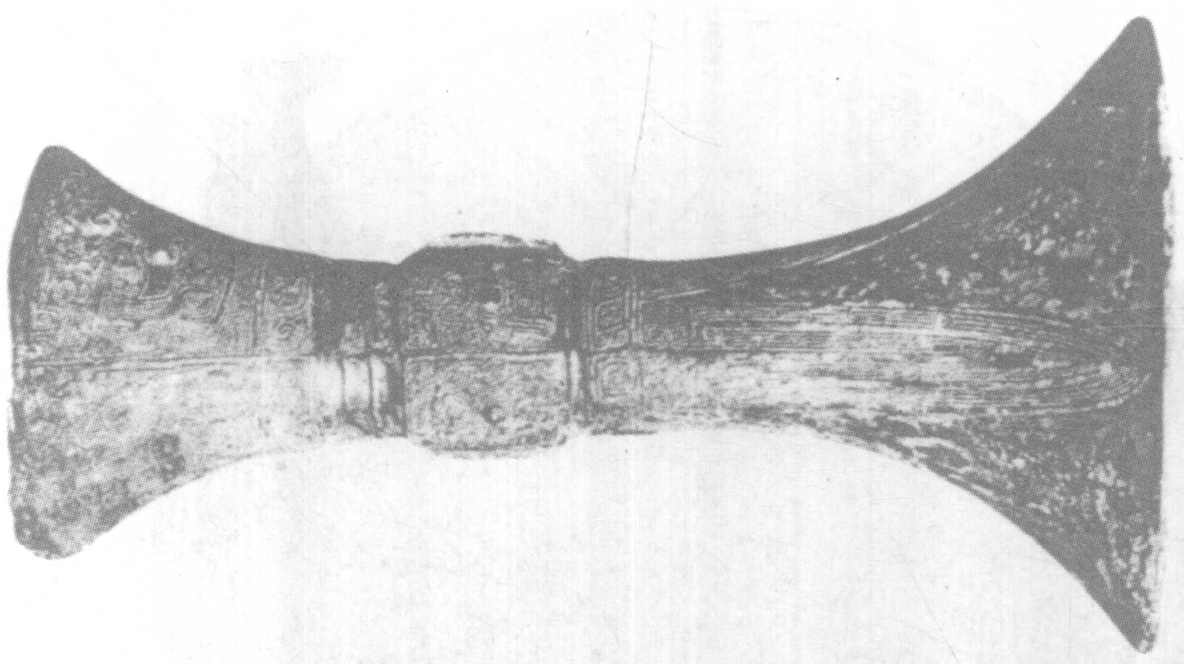


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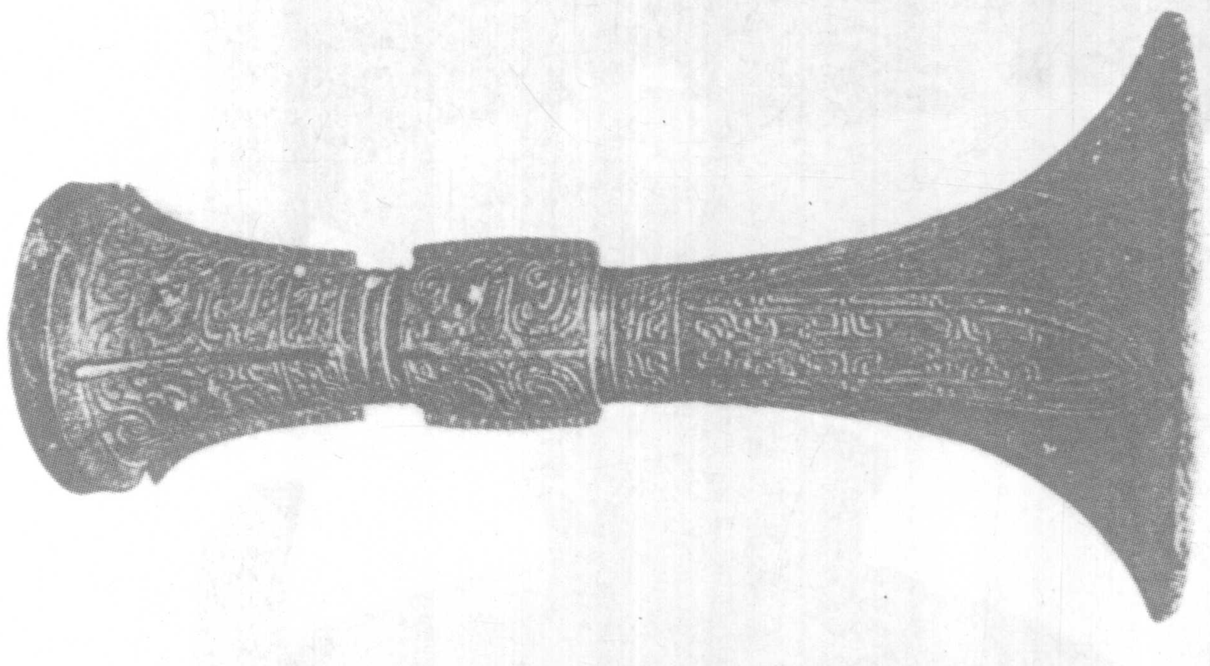


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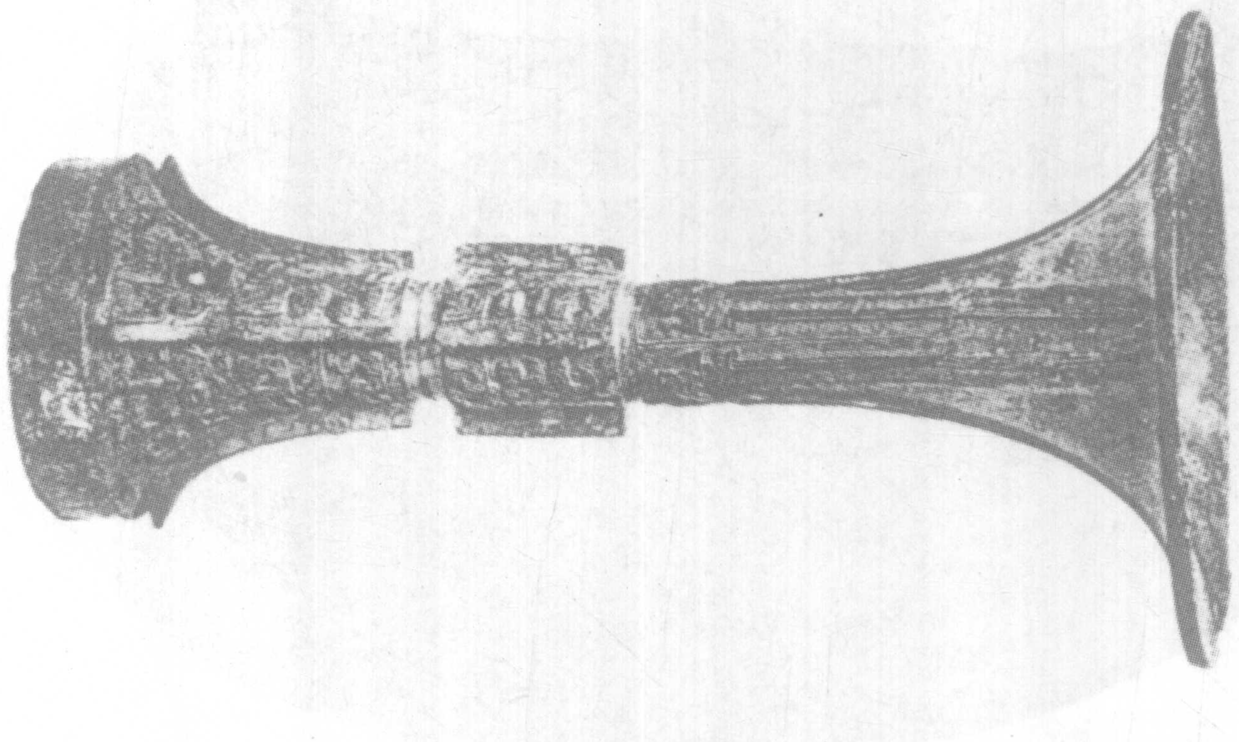
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A 283



A 219



A 124



B 36

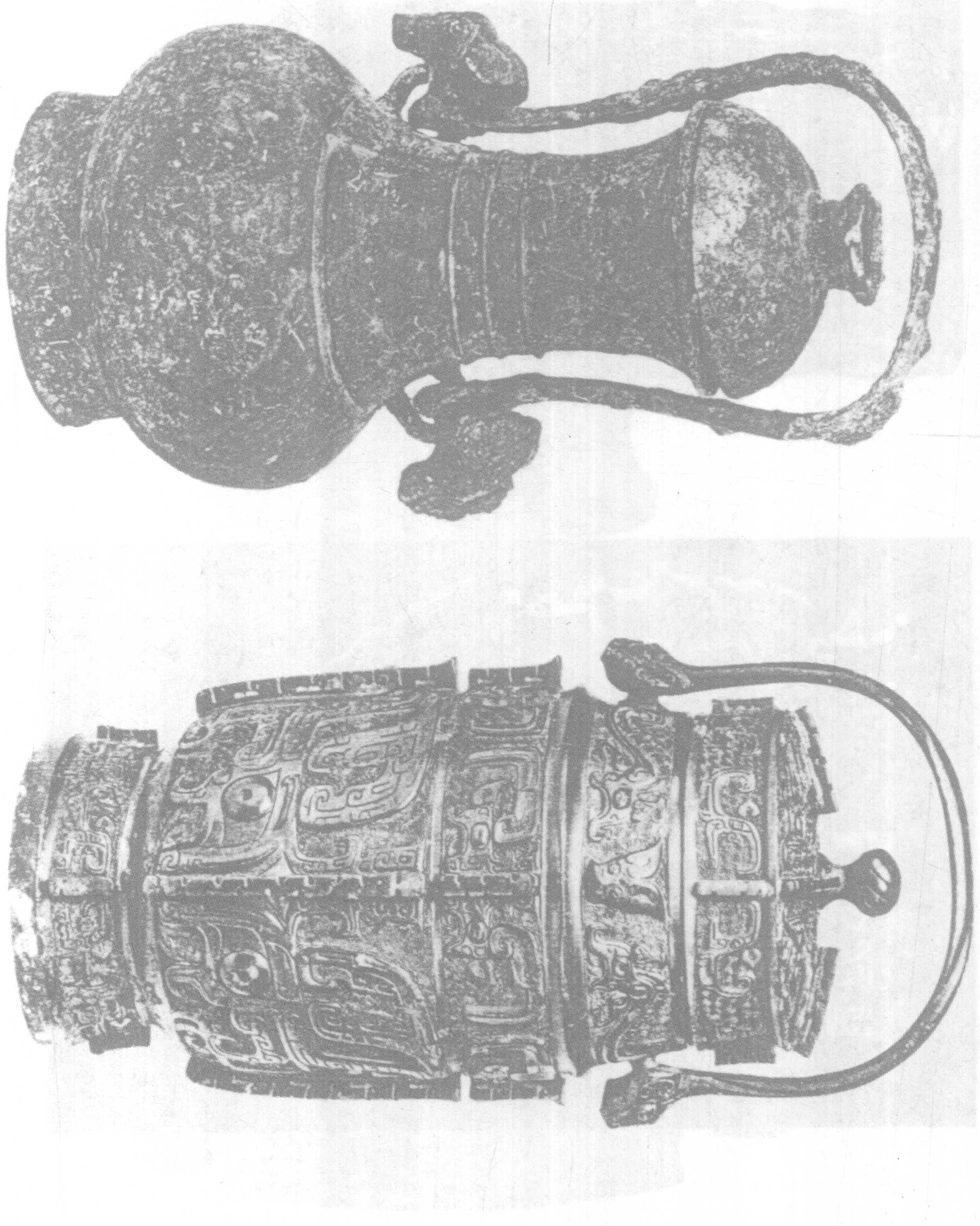
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PL. XXI.

Pl. XX.



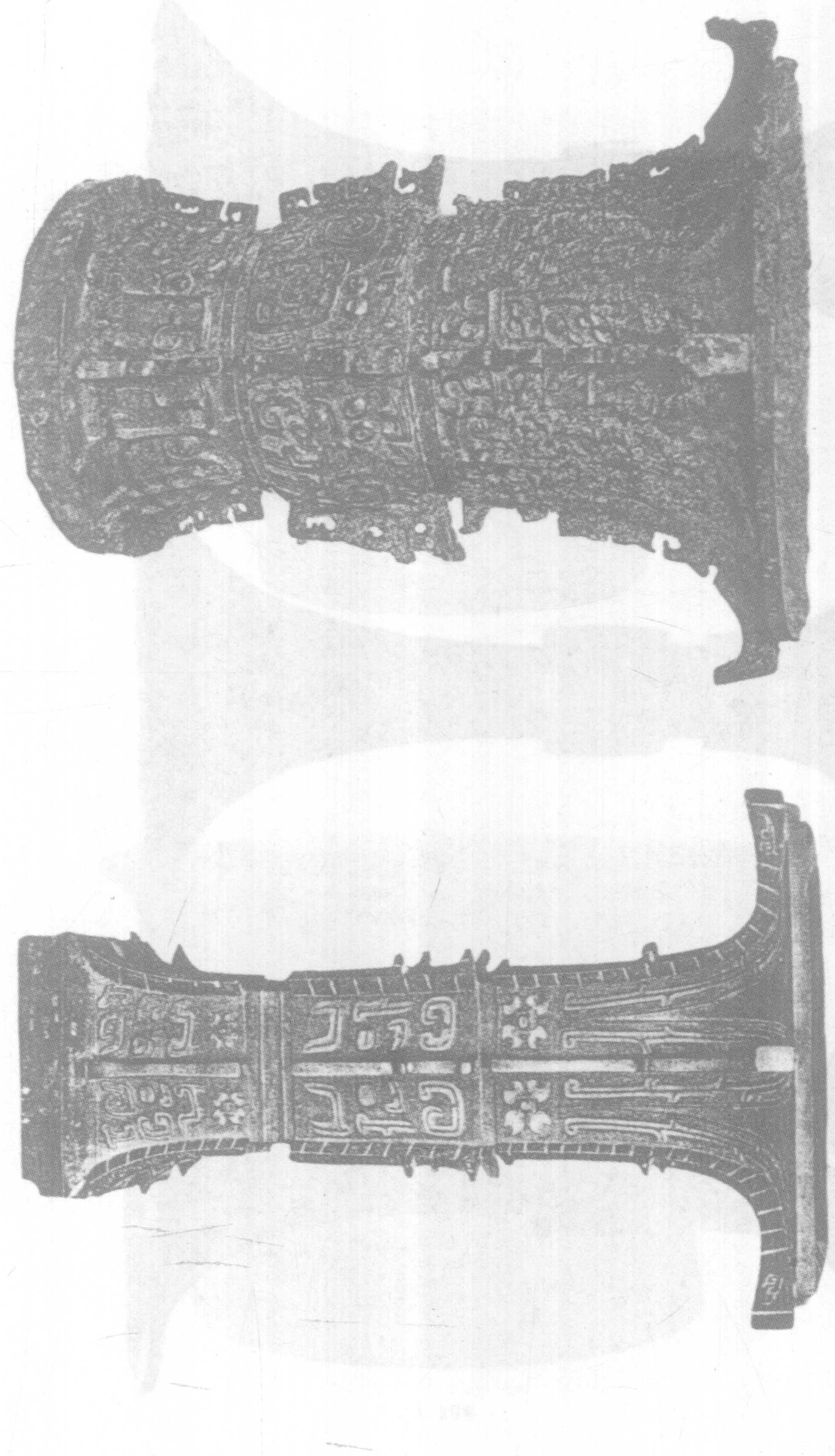
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A 67

A 287

PL. XXIII.



B 31

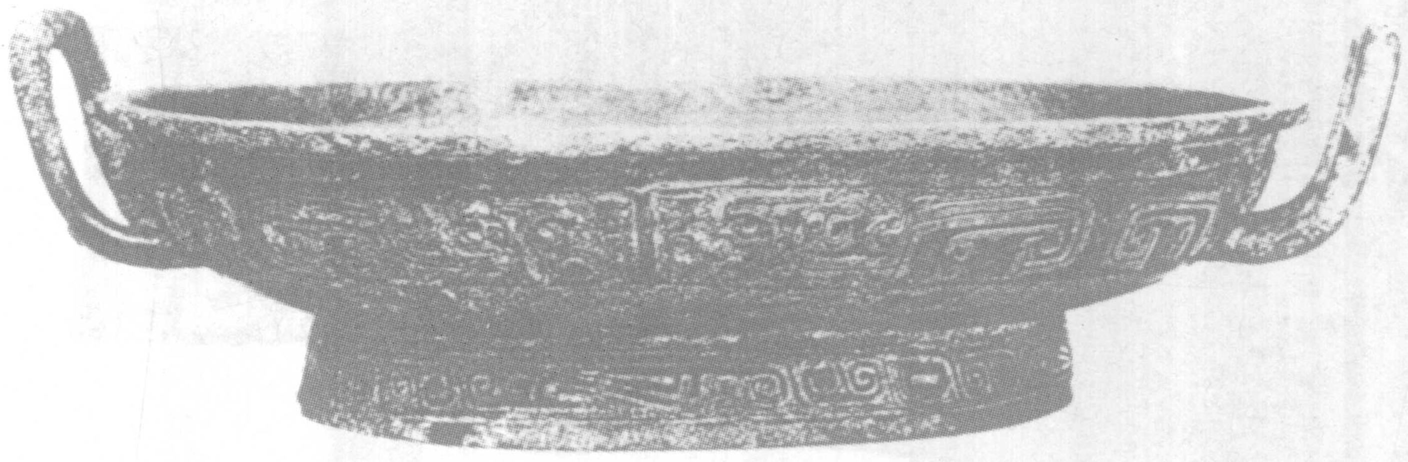
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Pl. XXII.

PL. XXV.

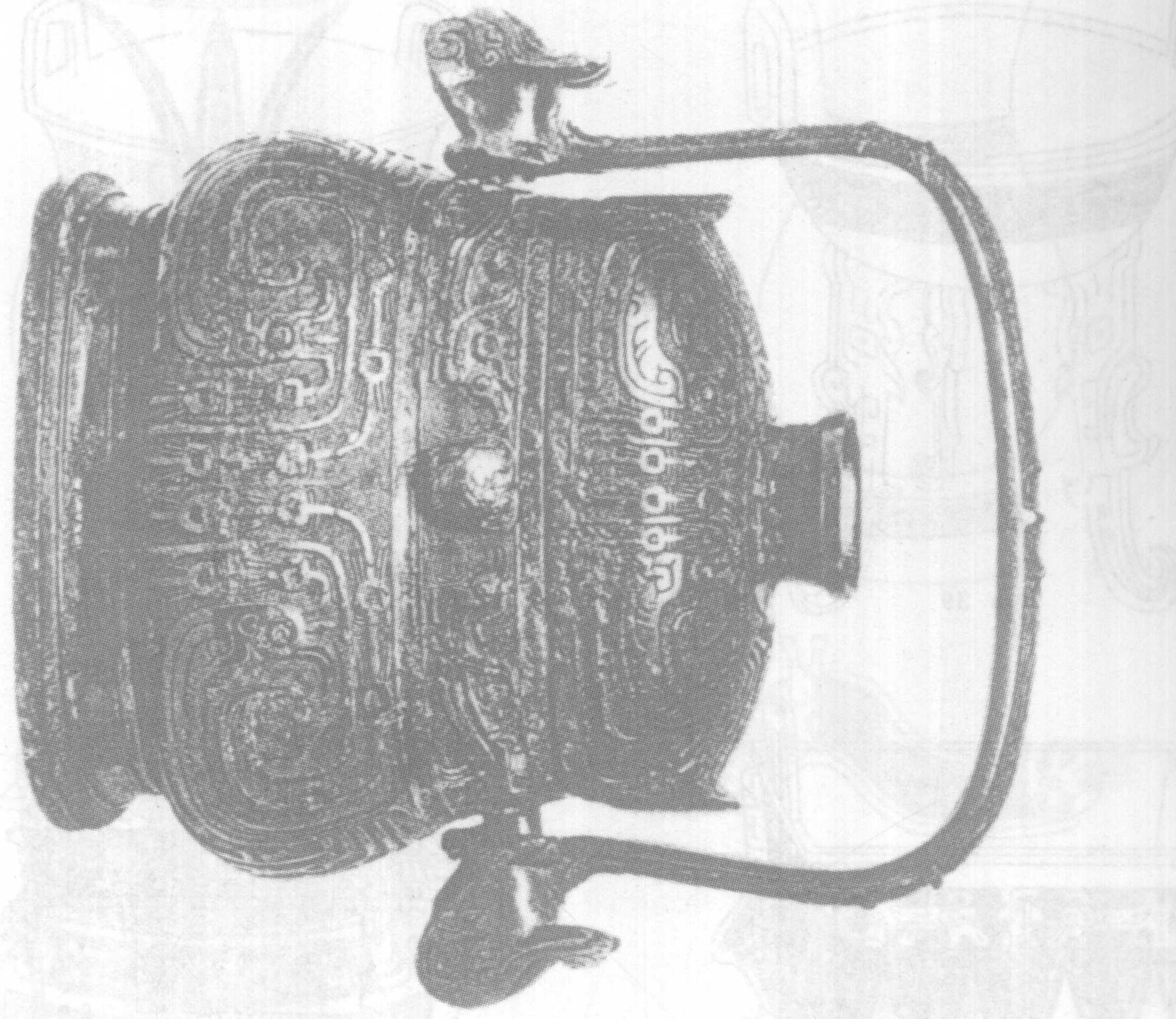


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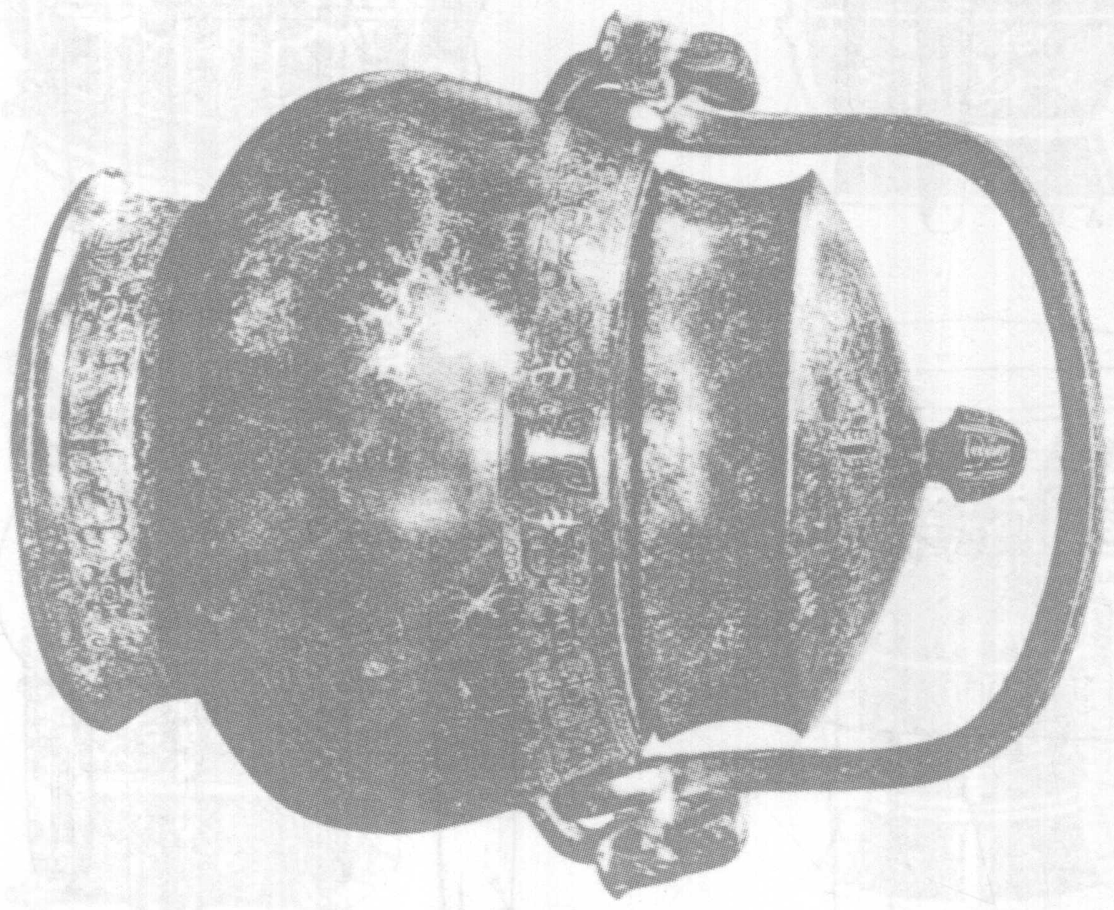


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PL. XXIV.



B 163



A 226

PL. XXVII.

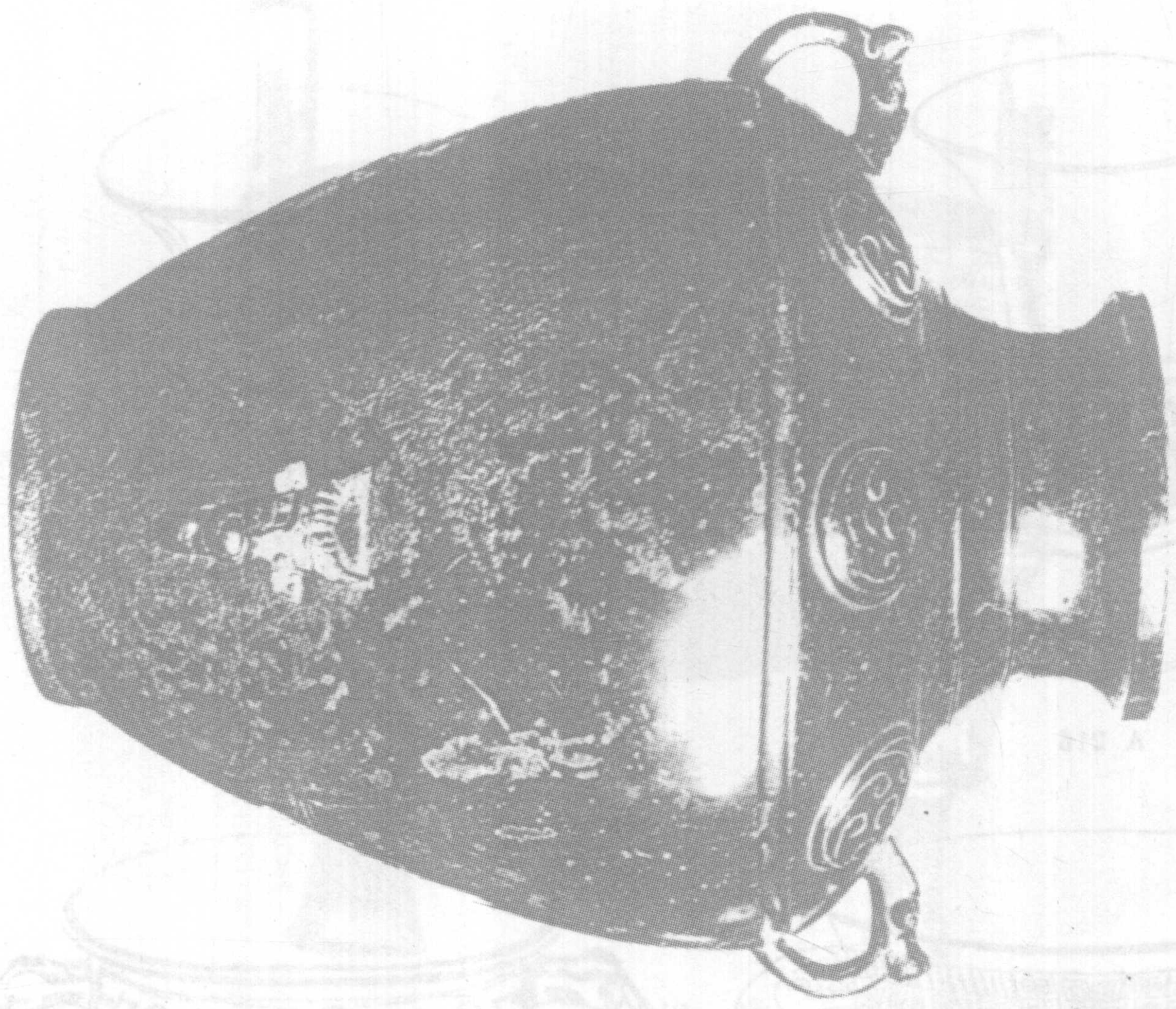


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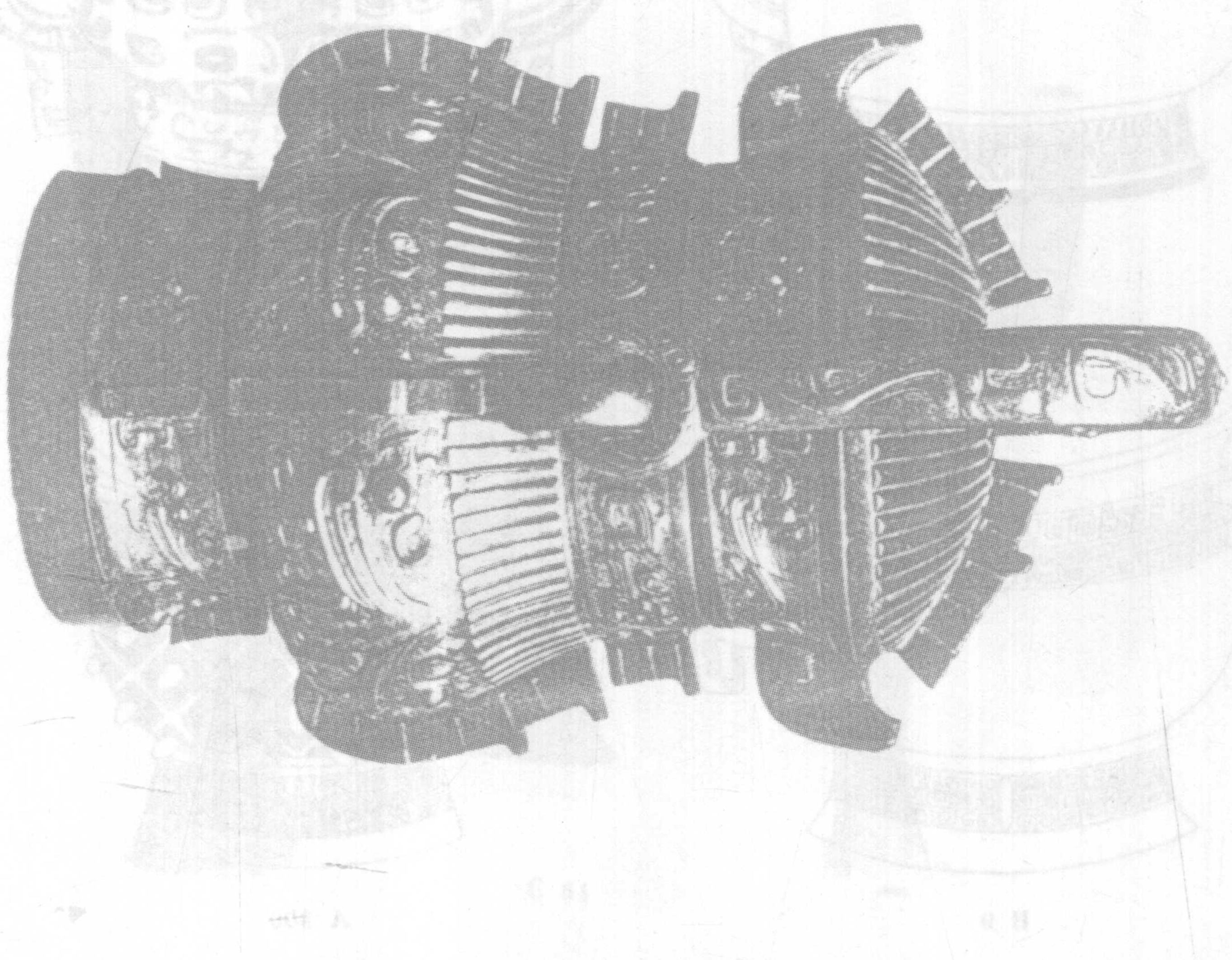


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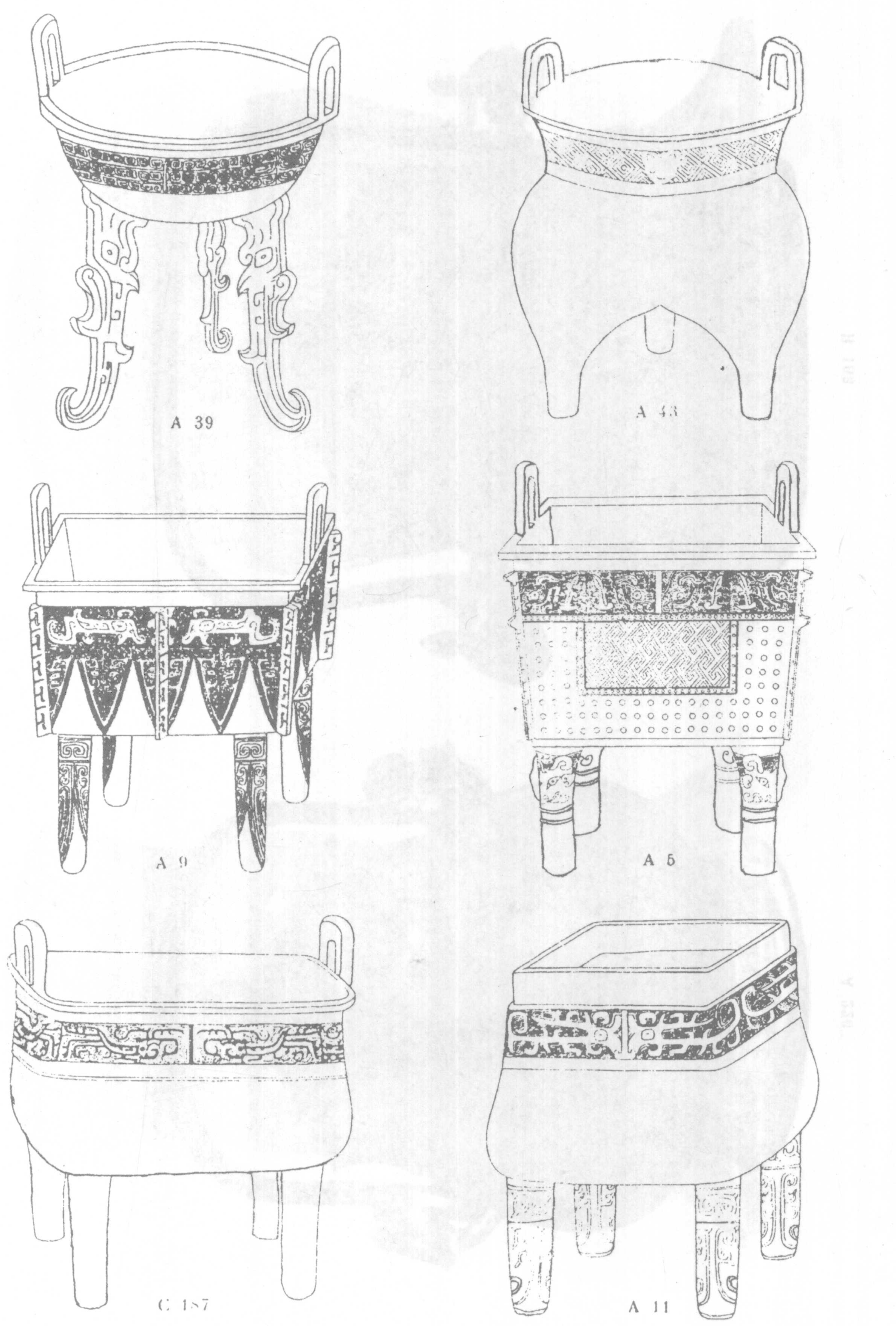


A 86



A 64

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A 39　A 43　A 9　A 5　C 187　A 11



A 178　A 187

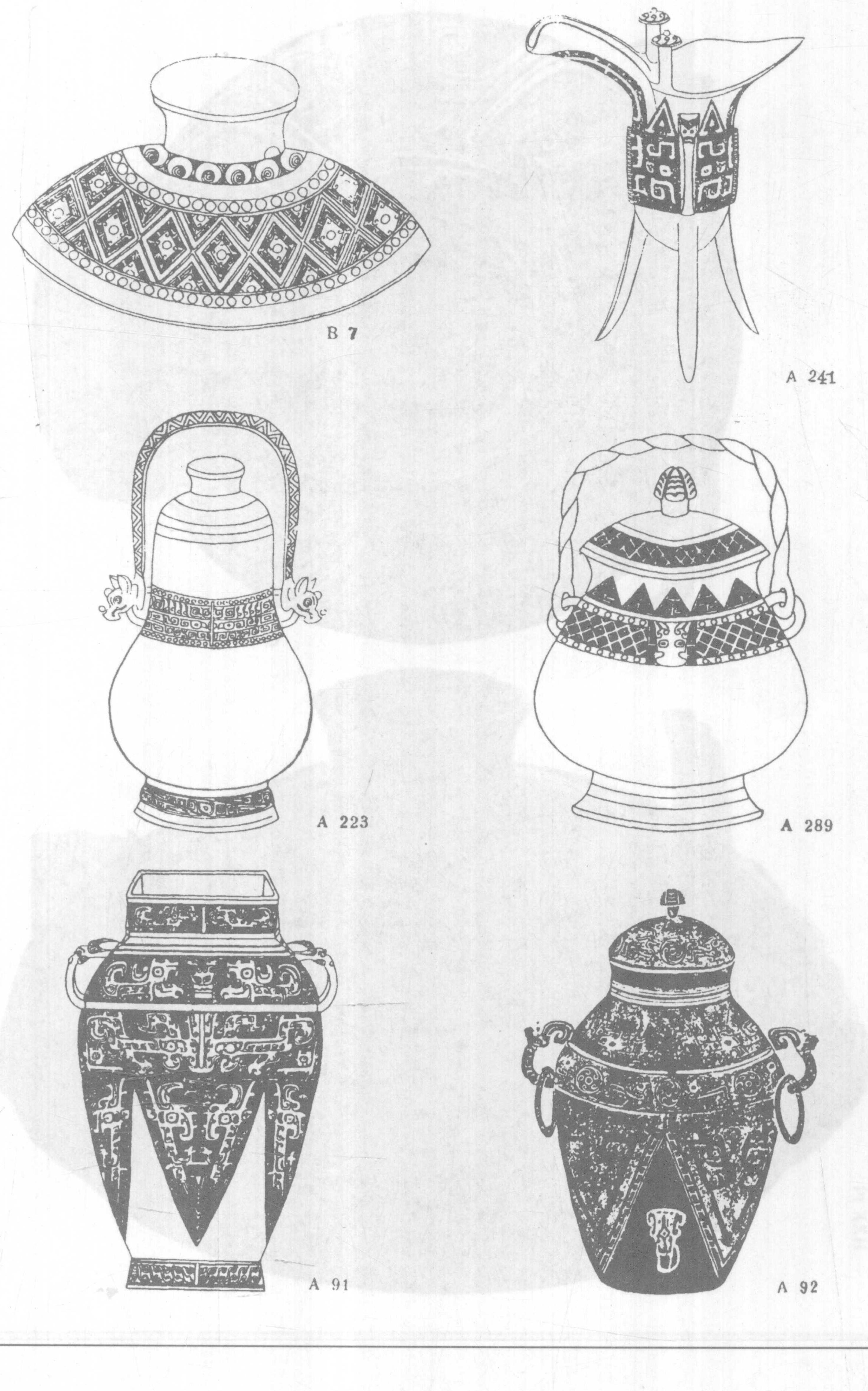
PL. XXVIII

PL. XXXI.



A 216　C 139　E 18　A 135　B 9　A 300

PL. XXX



B 7　A 241　A 223　A 289　A 91　A 92

Pl. XXXIII.

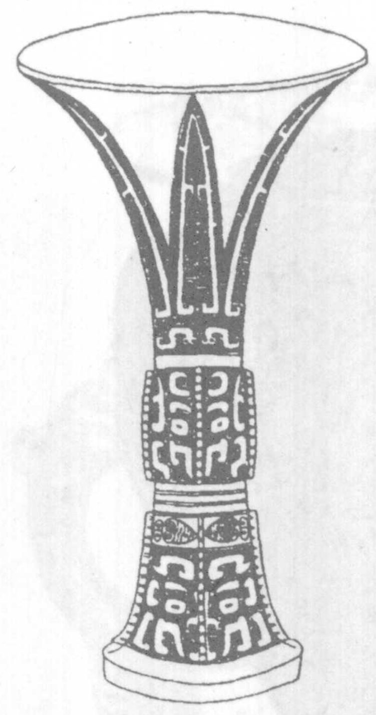


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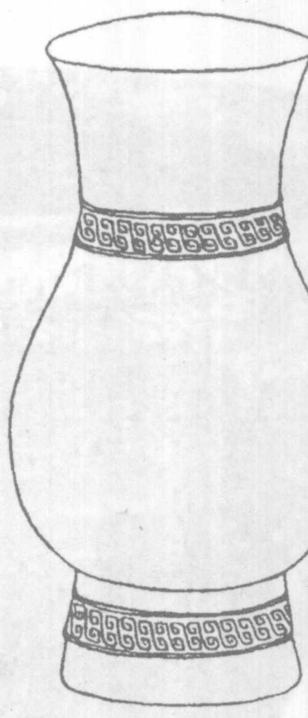


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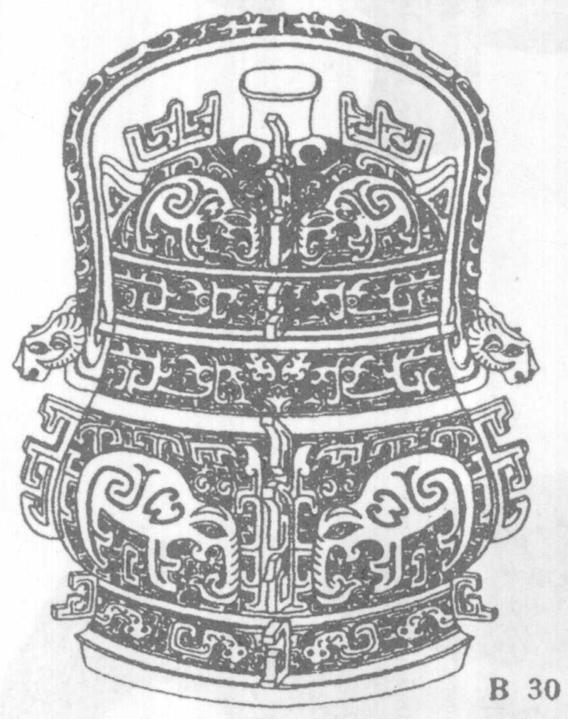
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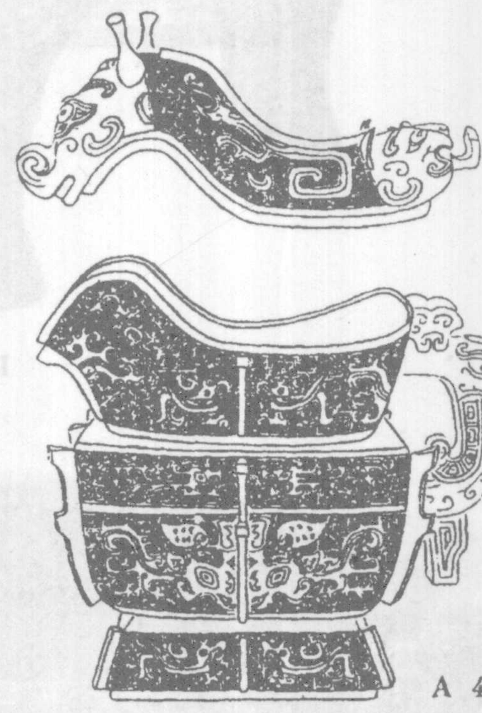
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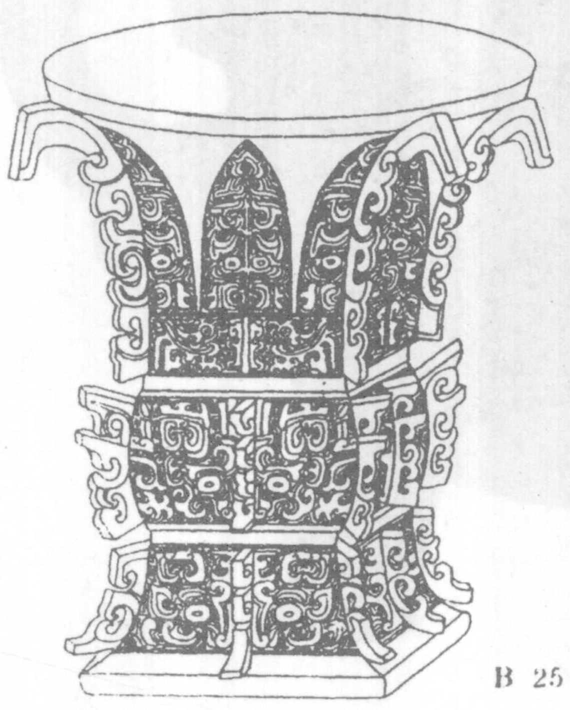
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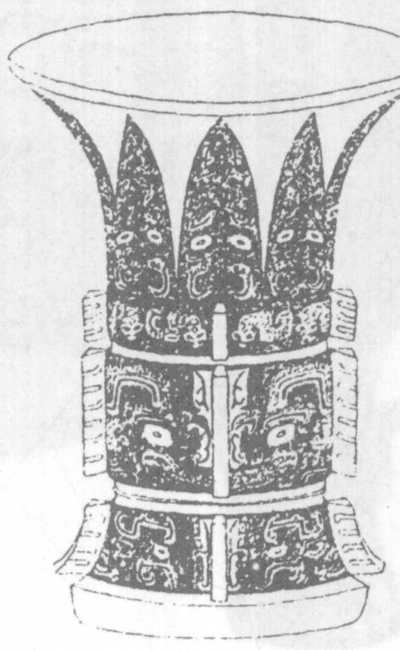
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A 48



B 25



A 208

Pl. XXXV.



C 140



E 42



B 116



E 32

Pl. XXXIV.



B 142



C 64

Pl. XXXVII.



D 25



C 8

Pl. XXXVI.



C 4



C 107

Pl. XXXIX.



D 28

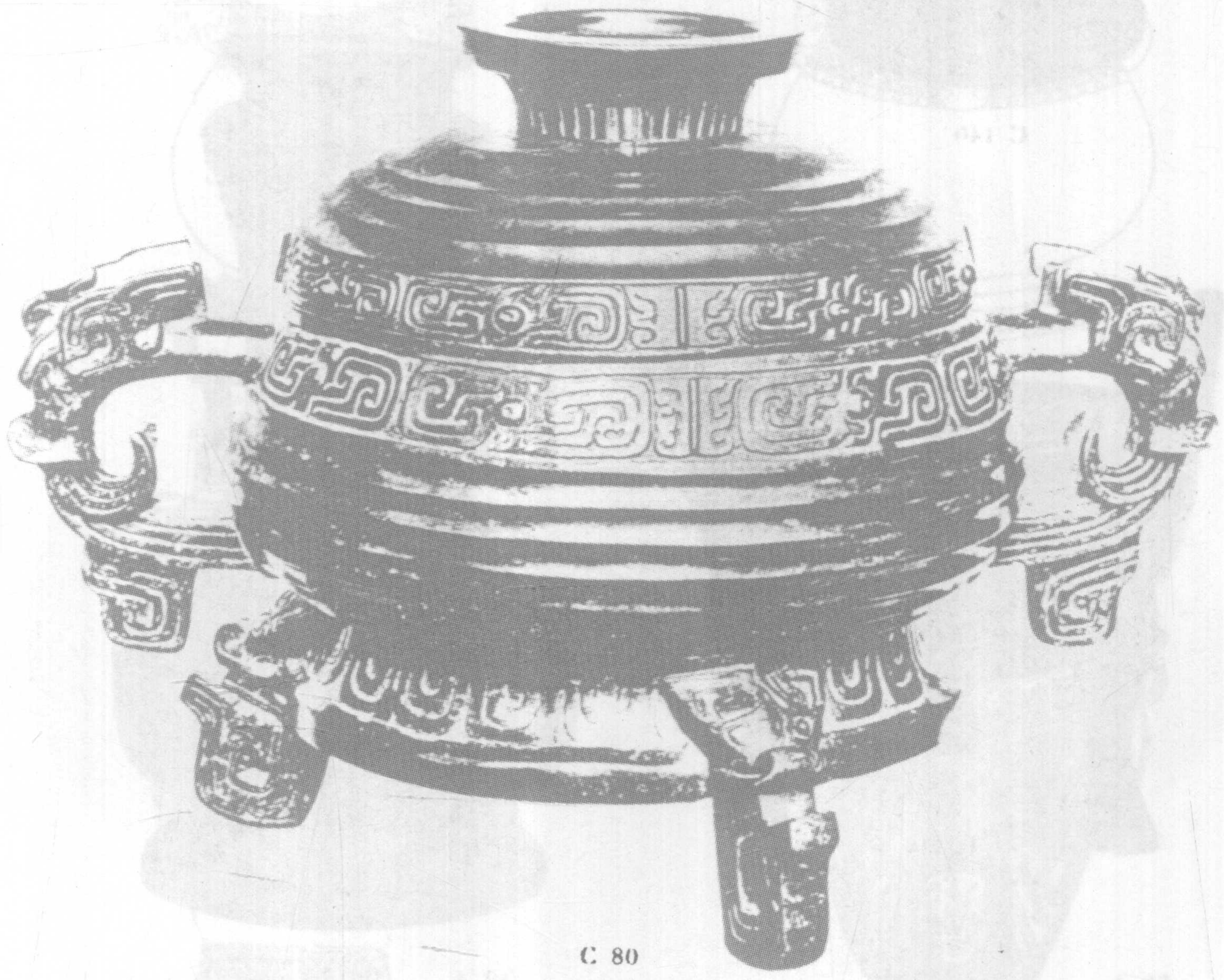


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Pl. XXXVIII.



B 90



C 80

Pl. XLI



B 133



B 89

Pl. XL.

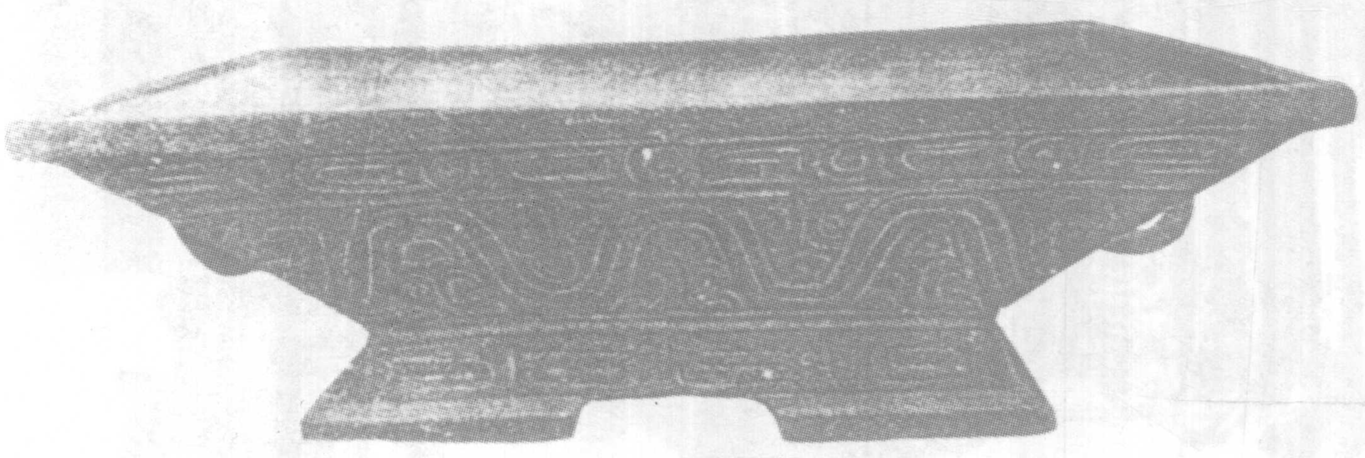


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D 4

Pl. XLIII.



D 5

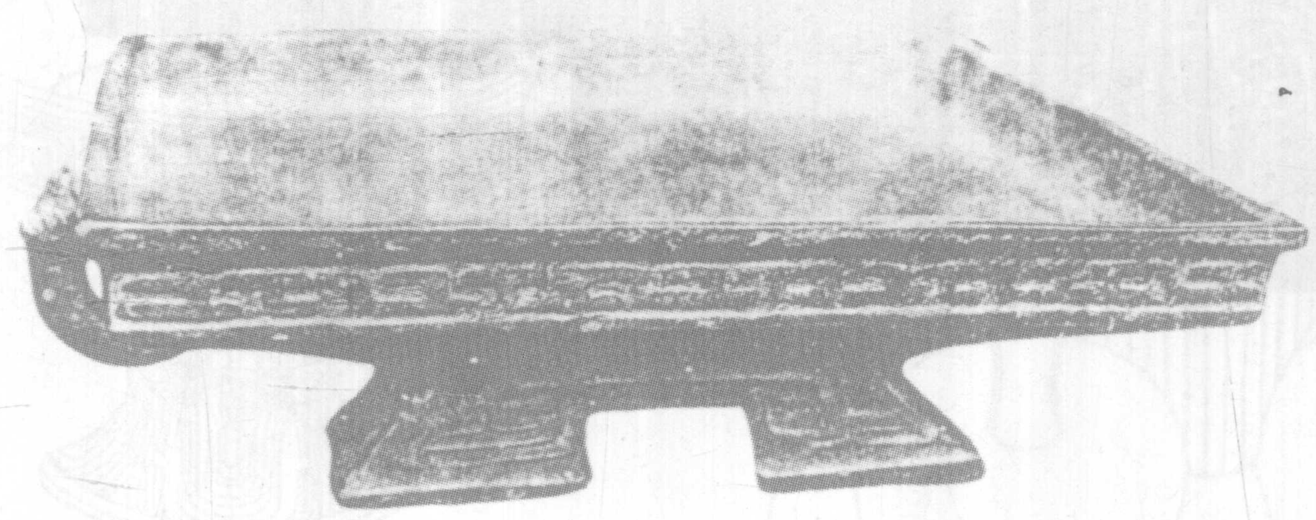


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XLII.



C 166



C 1

PL. XLV



B 120



C 39

PL. XLIV.



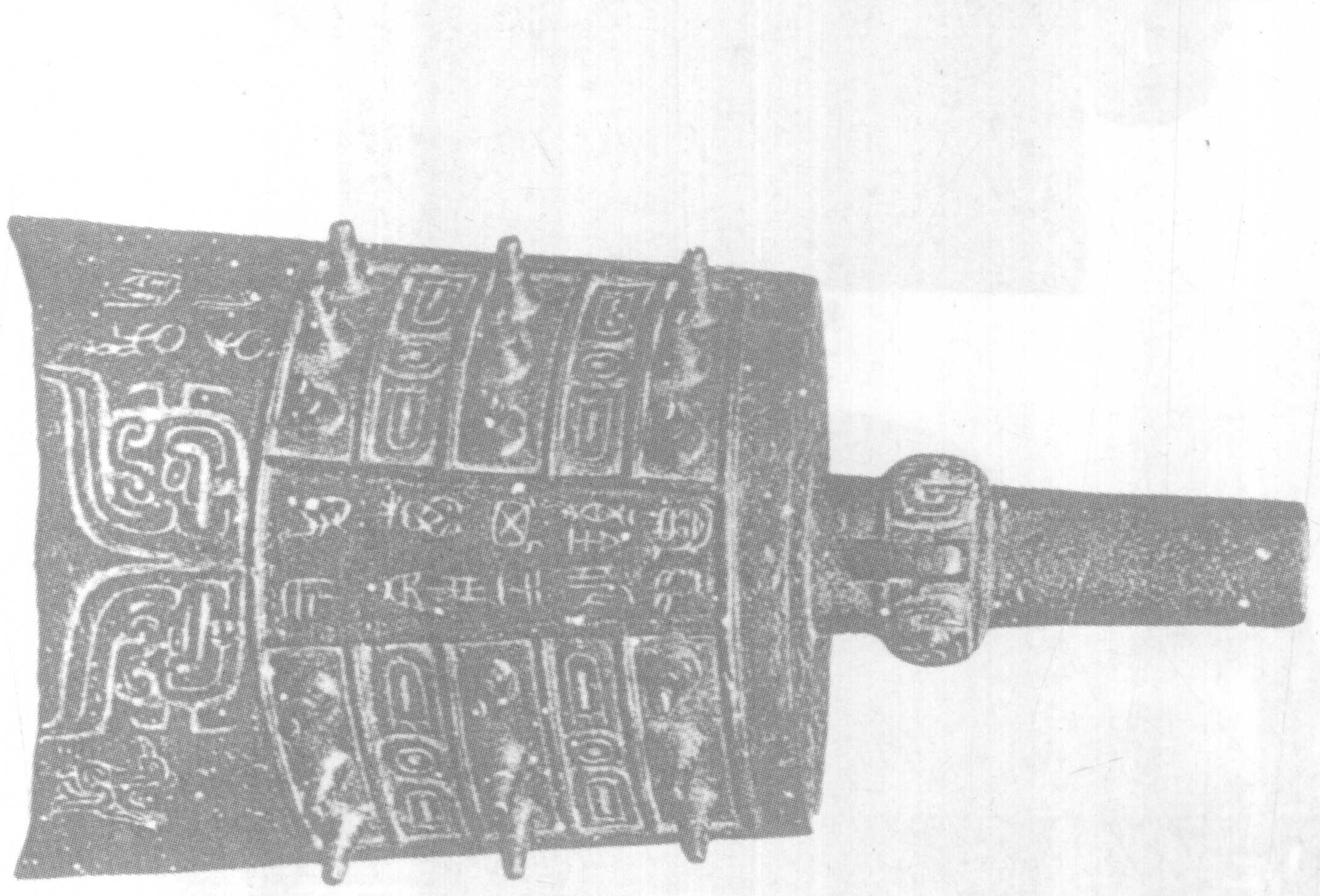
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C 40



B 94

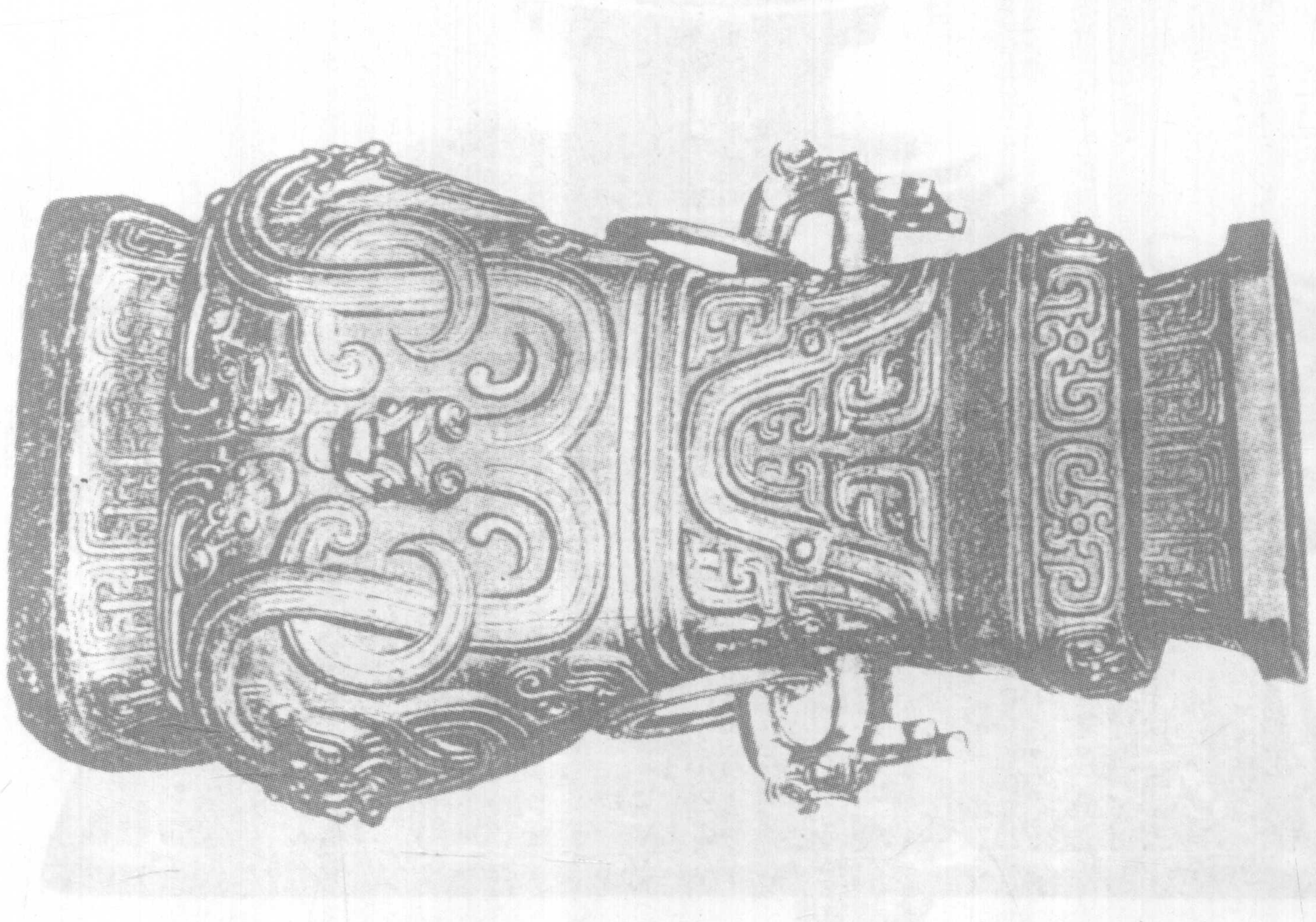


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PL. XLVII



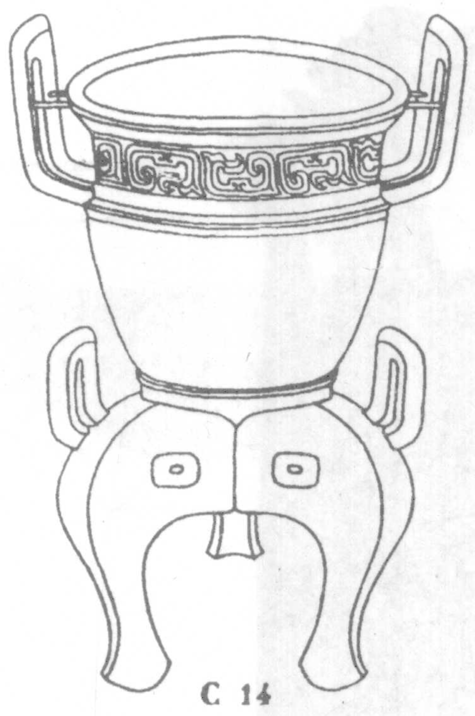
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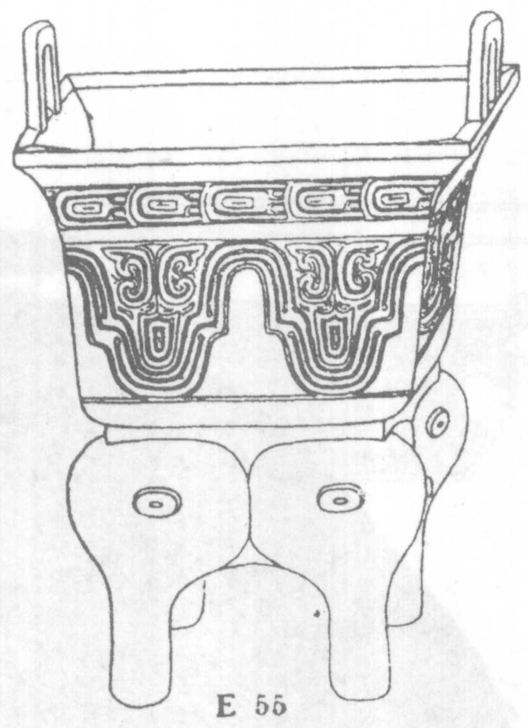
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PL. XLVI.

Pl. XLIX.



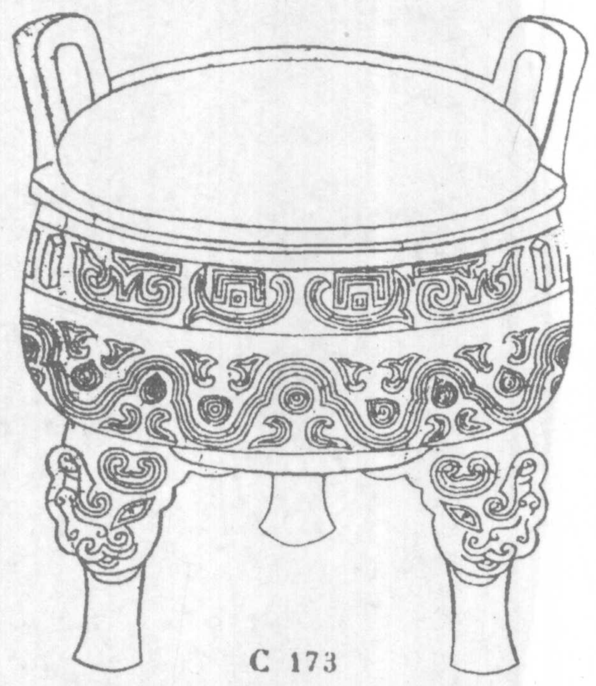
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E 55



B 88



C 173



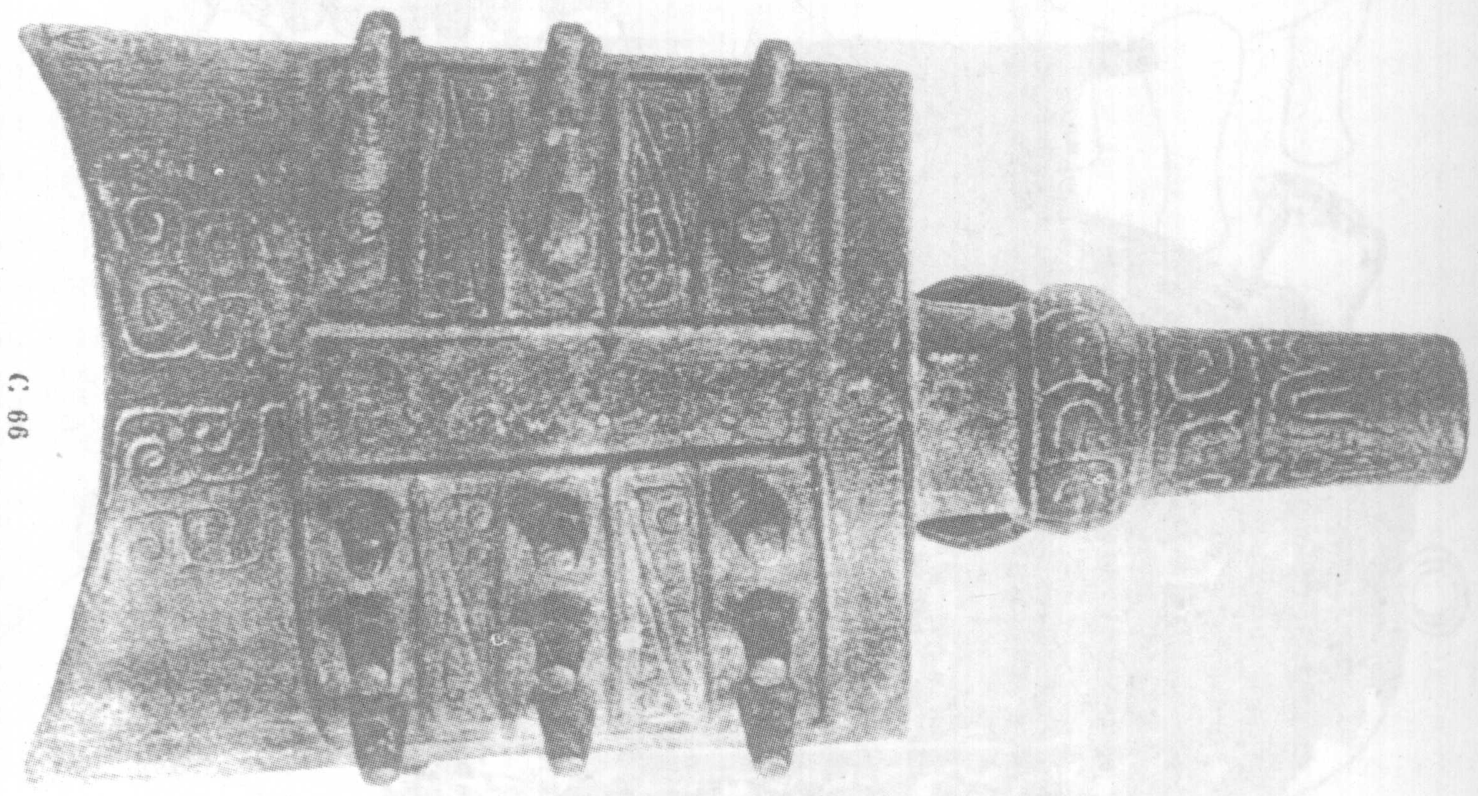
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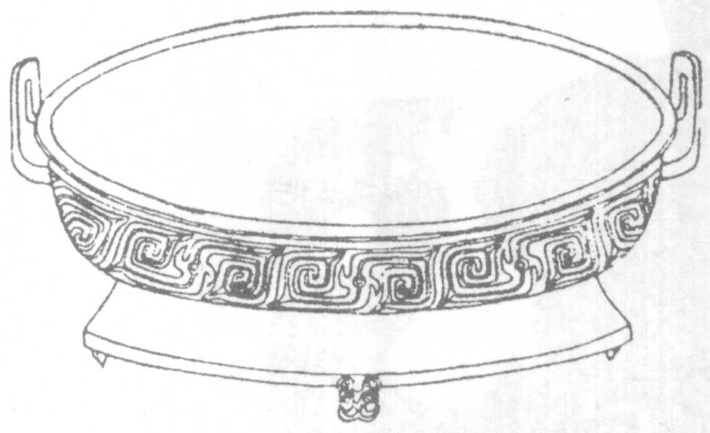
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C 66

Pl. XLVIII.

Pl. LI.



C 194



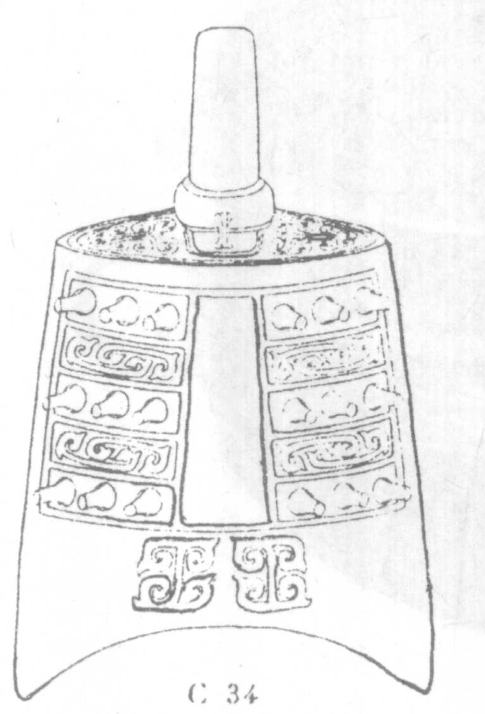
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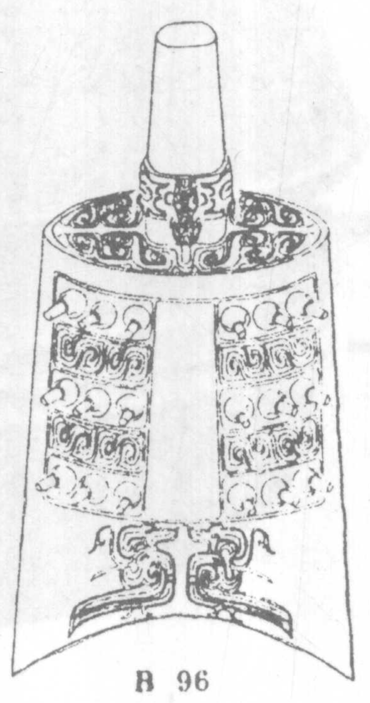
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D 49



C 34

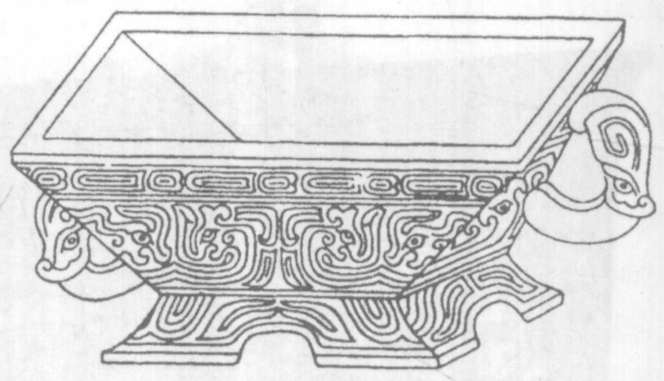


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Pl. L.



B 119



C 95



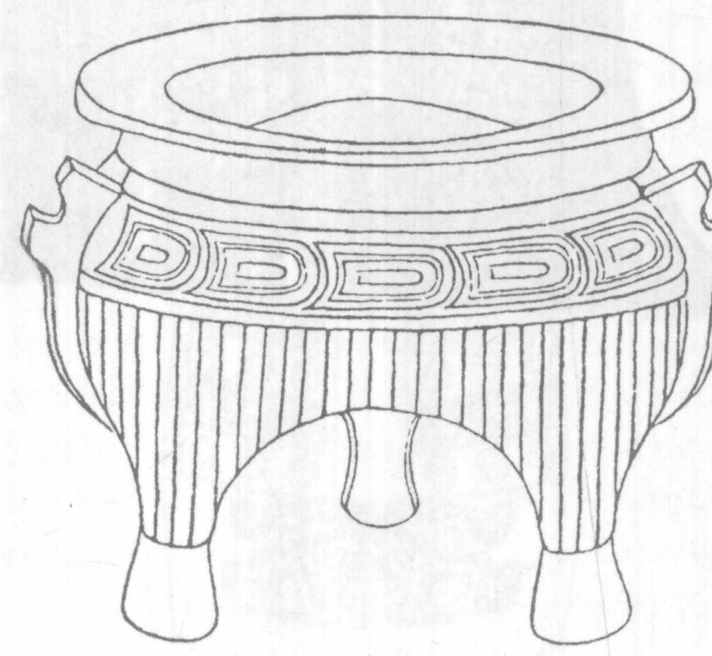
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C 55

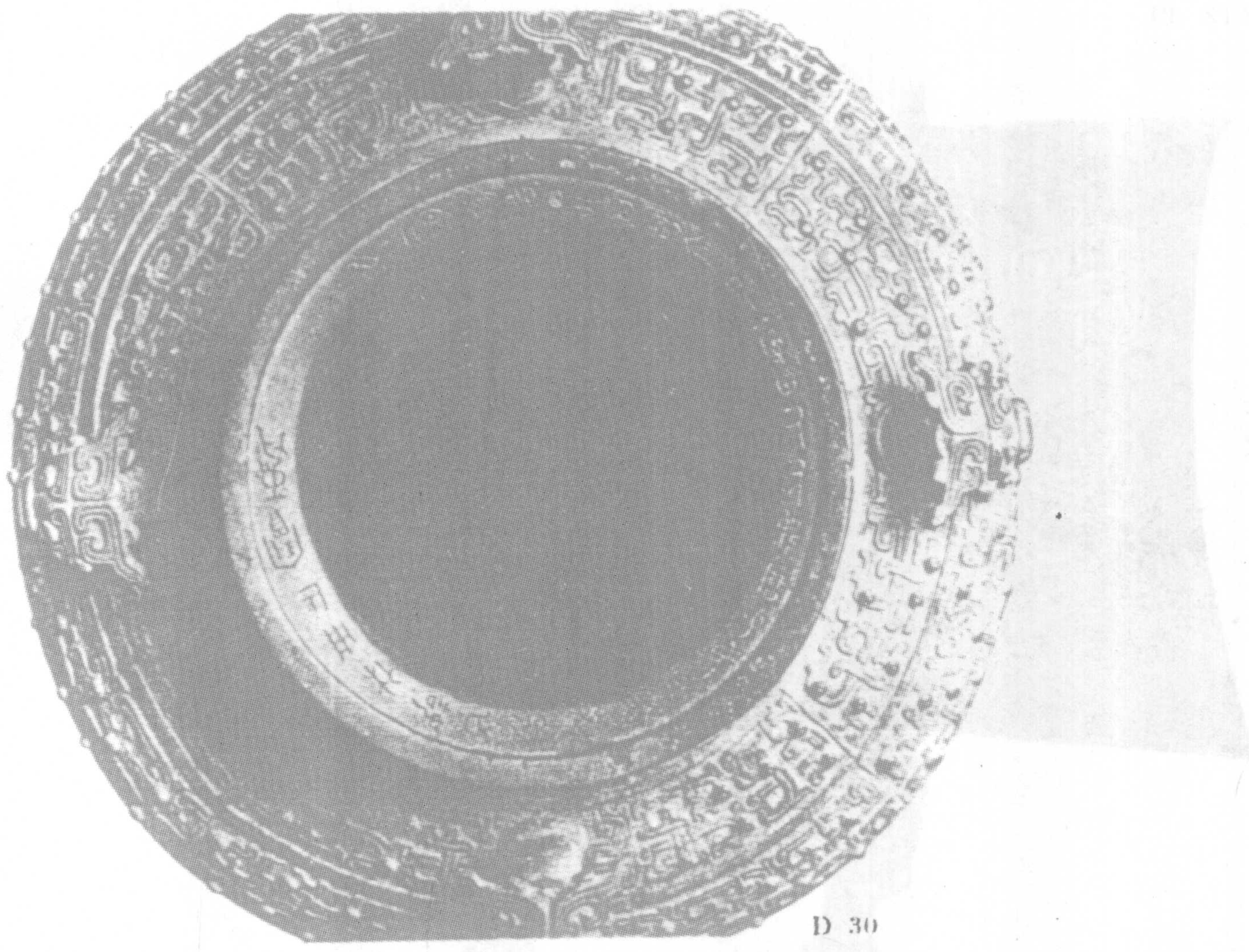


E 56



D 38

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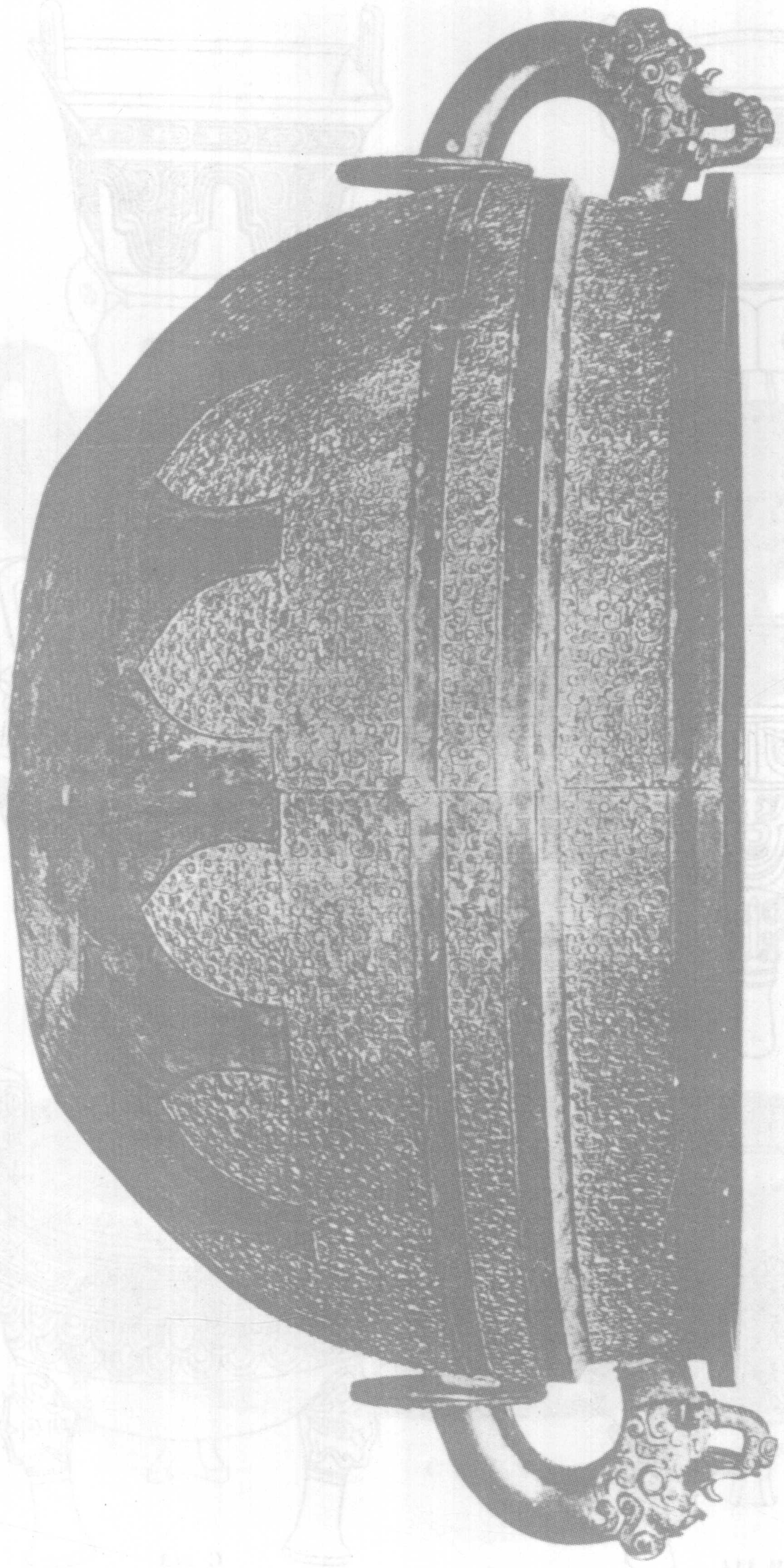


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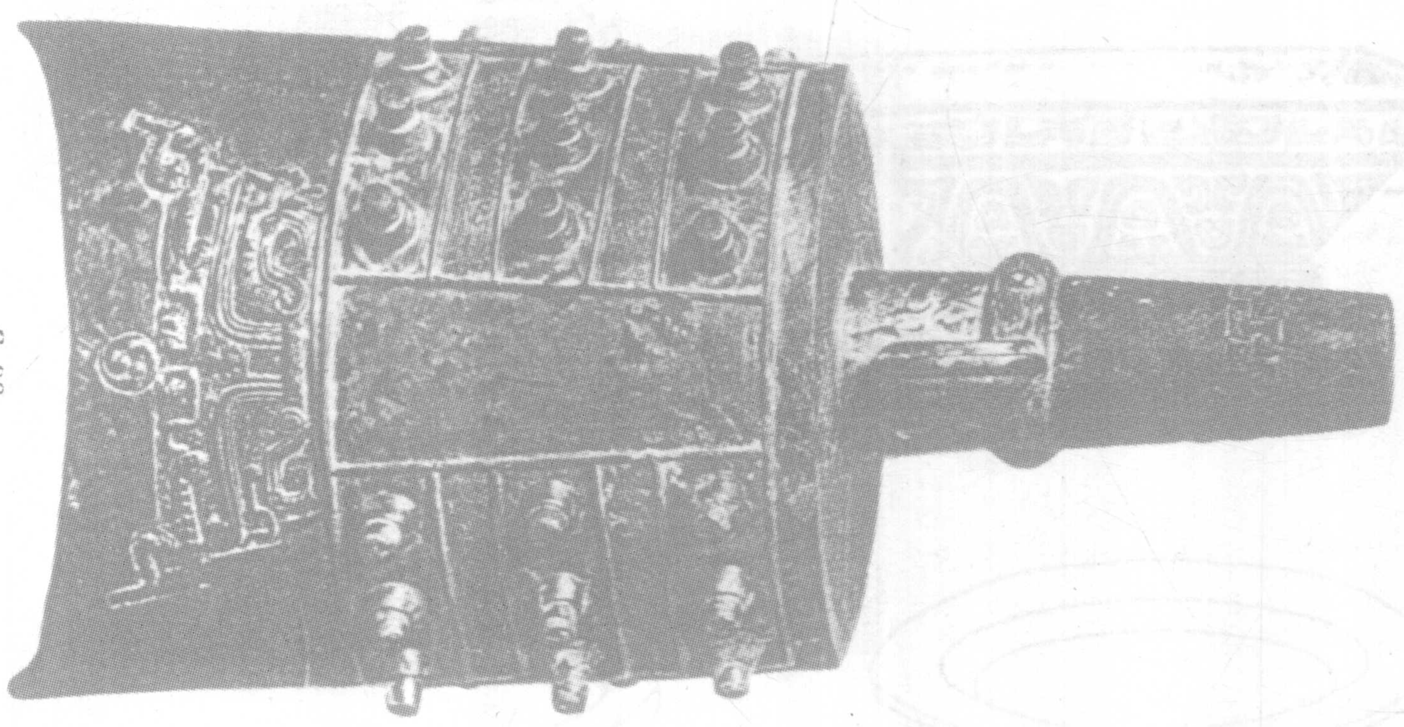
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Pl. LII.



C 183

Pl. LV.



C 98

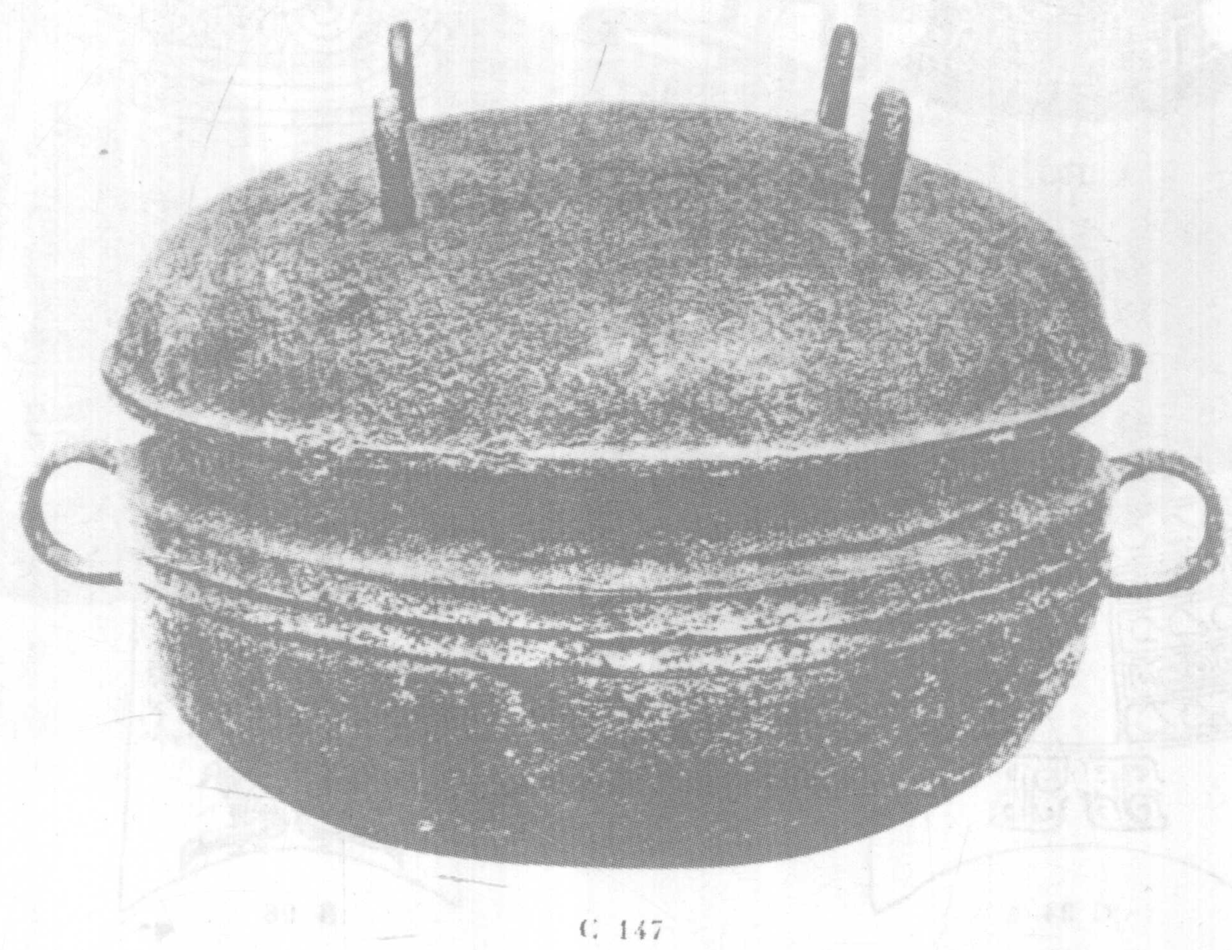


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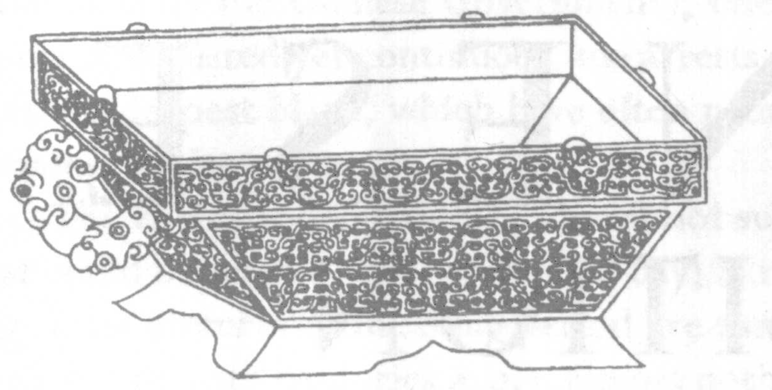


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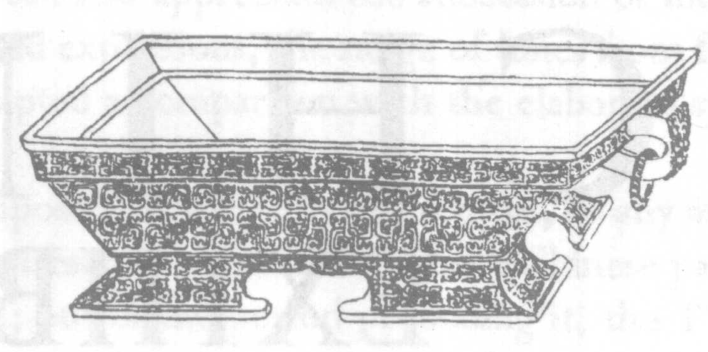


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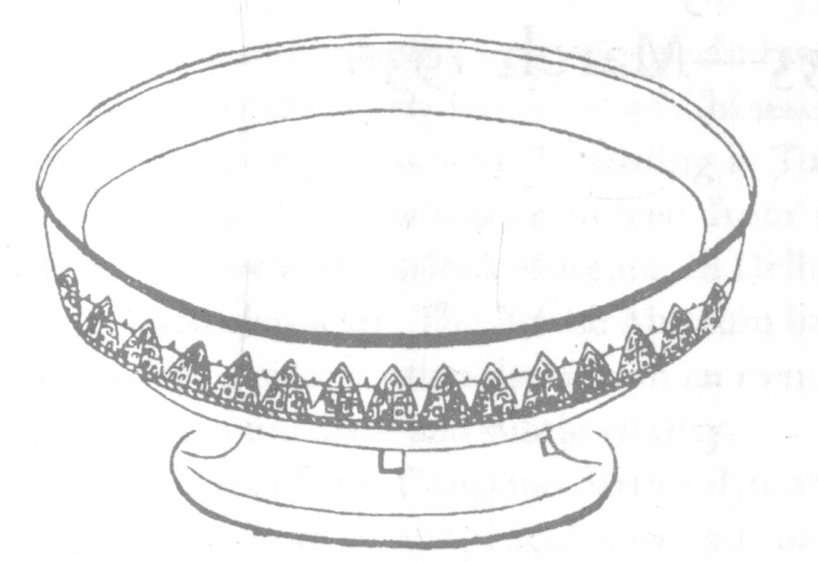
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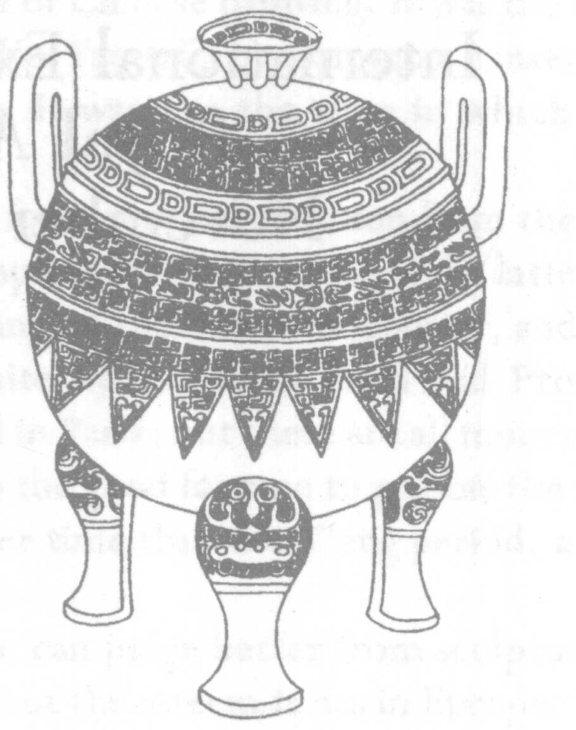
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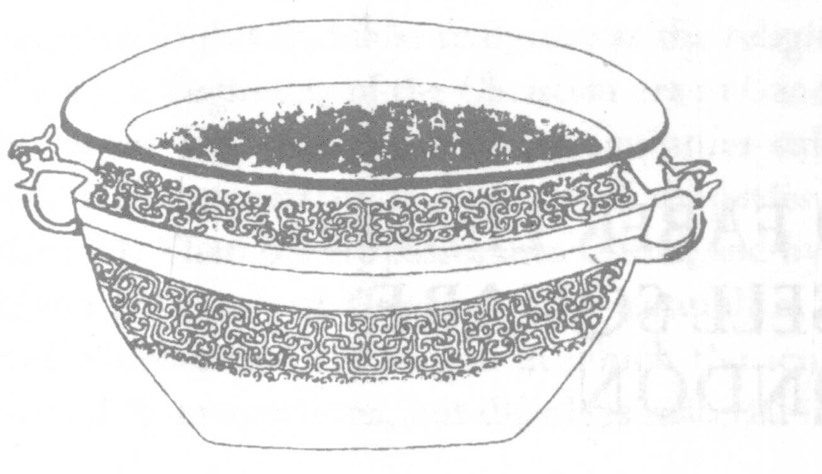
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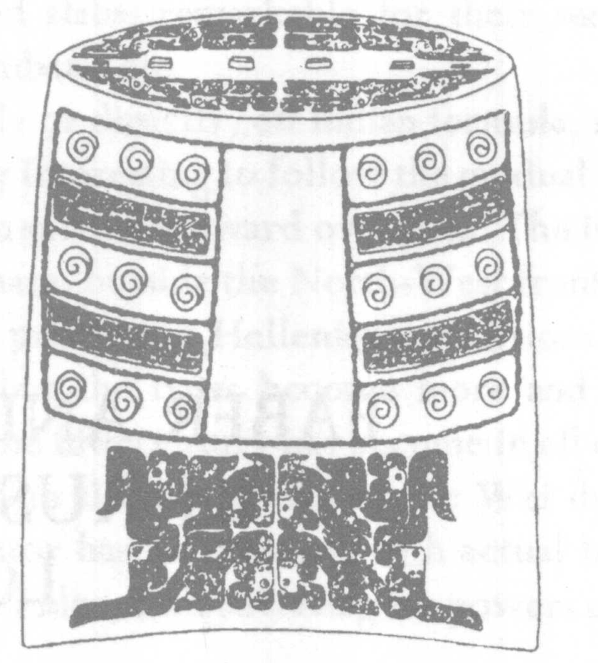
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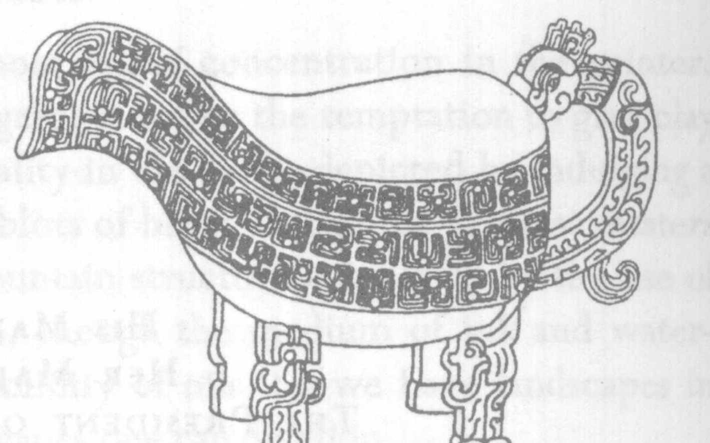


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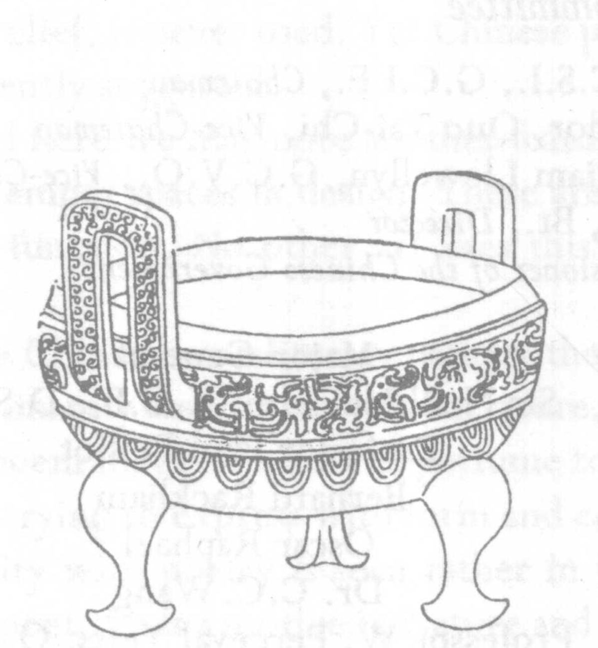
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C 5



C 186



C 126



C 128

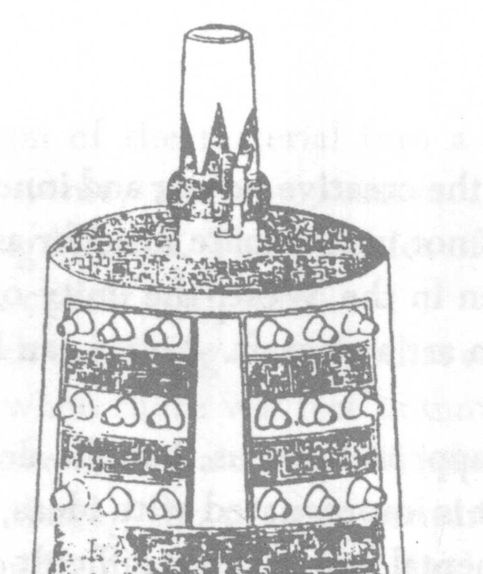


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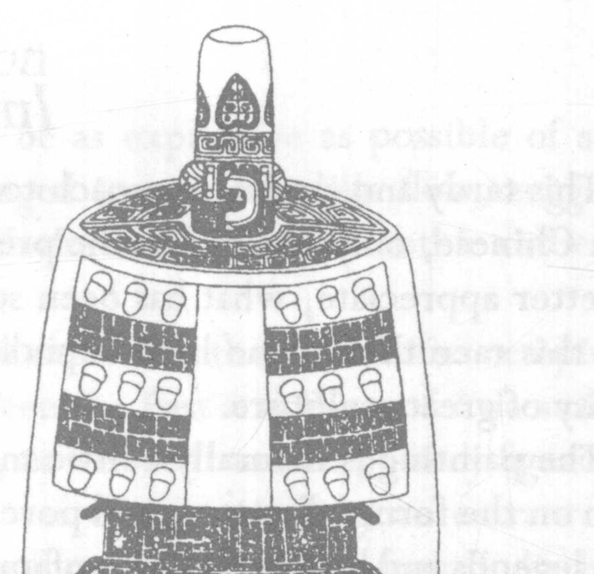


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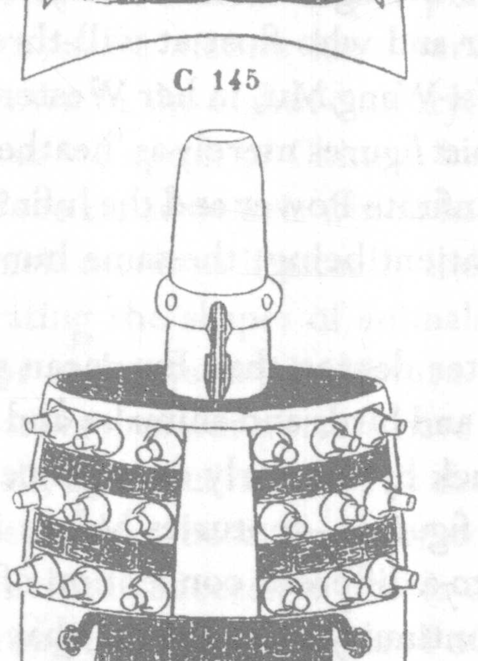
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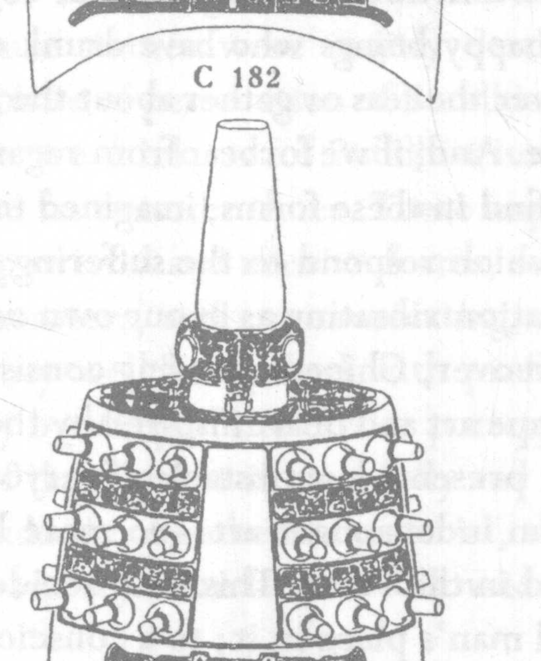
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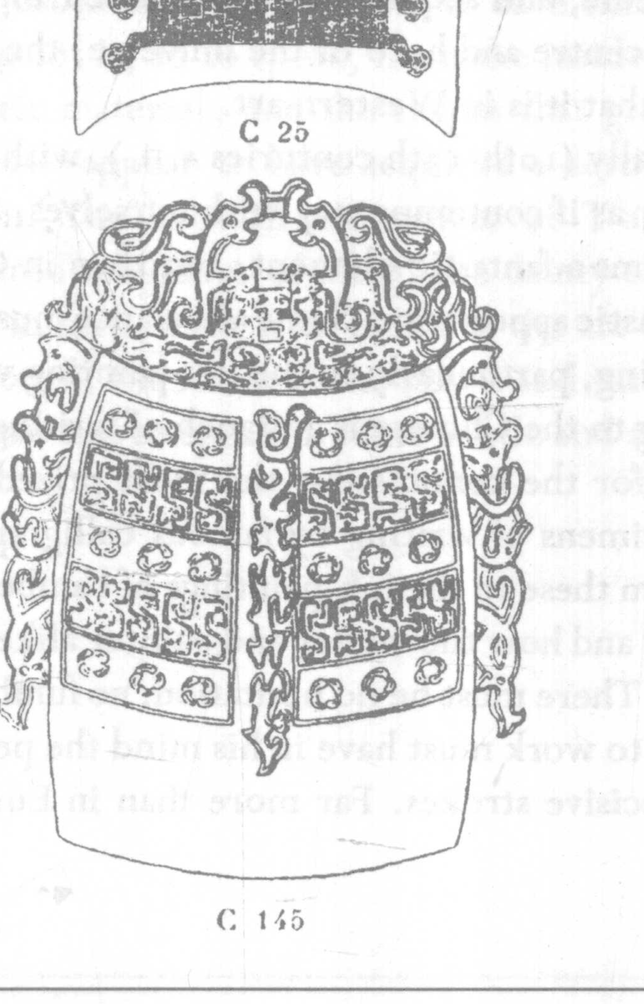
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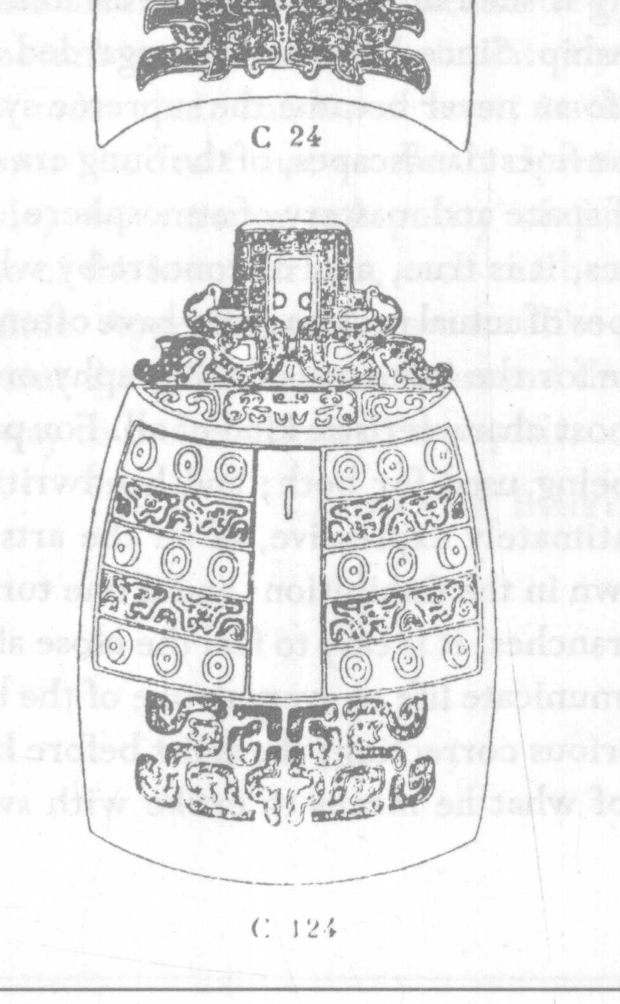
C 25



C 24



C 145



C 124

THE CHINESE EXHIBITION

A Commemorative Catalogue of the
International Exhibition of Chinese Art
Royal Academy of Arts
November 1935—March 1936

FABER AND FABER LIMITED
24 RUSSELL SQUARE
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INTRODUCTION

Chinese art has long been with us in various forms, though perhaps we have been little conscious of it as art, because it entered so unobtrusively into our daily life. The services of a fastidious fineness have been (like the aroma of tea itself) associated with English homes and the generations from which they were handed down rather than with thoughts of the sensitive skill of fingers patiently at work in the farthest of far-away countries, partly perhaps because those translucent cups and saucers with their shell-like delicacy seemed almost too perfect to be the work of human hands. Many old English houses had—some still have—Chinese wallpapers; and we may not have stopped to think how the Chinese adoration of the beauty of flowers has affected for so long the decoration of our houses, supplying a world of motives such as the artists of the Middle Ages delighted in, but which classical and Renaissance ideals have almost entirely eschewed, deploying these motives, too, with a new kind of largeness and liberality in design. Silken fabrics, again, taught us refinements of colour-harmonies before unknown. Chinese furniture gave more than a hint to English master-craftsmen like Chippendale. But it is, of course, in ceramics that Chinese inspiration has been of paramount importance; there, all Europe has sat at China's feet.

It may seem strange that the handiwork, the taste, and the fancy of designers living in a country so remote, so little known, and belonging to a civilisation which had no common origin with that of Europe, should enter into and make themselves at home in the daily life of English people. At first, no doubt, there was the charm of the exotic that attracted; but it was no transient fashion, and in the main we may believe that it was the intimate companionship with Nature, the deep love of flowers, birds and animals expressed so abundantly in Chinese art, that made the permanent appeal to us.

Yet all the while we were content to assume that this efflorescence of design, at once refined and gay, this surpassing sense for exquisite texture in materials, were the possession of a race of craftsmen content only to shape and decorate things of use; we had not the curiosity to inquire whether behind all this were not creative artists, as in Europe, whose work embodied the imaginative ideals of the race. If we had inquired, we should have found out that, for the Chinese, painting is the supreme art; and Chinese painting has a far longer tradition than that of any European country. For more than sixteen centuries there has been a continuous succession of gifted artists, and their art has been nourished on thought and religion, has expressed a philosophy of life.

Introduction

This tardy and gradual approach to a realisation of the creative power and inner genius of the Chinese, only attained in the present century, is not unfortunate in so far as we can the better appreciate, what has been so often forgotten in the West, the unity of all art. With this race there is no hard bounding-line between art and craft. A vase can have the nobility of great sculpture.

The painting is naturally a little more difficult of approach for us than the decorative design on the forms of pottery and porcelain, because it is impregnated with ideas, associations, legends and beliefs that are unfamiliar. Yet that mental world is not difficult of access if we take a little trouble. We soon come to recognise the figures of the fairyland of the Taoists, happy beings who have drunk of a magic elixir and who float at will through the air and over the seas or gather about the Fairy Queen, Hsi Wang Mu, in her Western mountain home. And, if we forbear from regarding the Buddhist figures merely as 'heathen idols', we shall find in these forms, imagined to incarnate the Infinite Power and the Infinite Compassion which respond to the suffering cry of every sentient being, the same human need and aspiration vibrating as in our own natures.

Moreover, Chinese painting consists, to a far greater degree than European painting, of landscape art and of art inspired by the life of flowers and birds and animals; and here the approach presents less obstacles. Everyone must be struck by the early emergence of landscape as an independent art—no mere background for figures—centuries before it was so conceived in the West. This is no accident; it belongs to a different conception of the universe and man's place in it; to a consciousness of the continuity of all life, so that each living thing is seen in relationship to an infinite whole, and acquires a significance from that relationship. Since Man was not regarded as the centre and hero of the universe, the nude human form never became the supreme symbol that it is in Western art.

The finest landscapes, of the Sung era especially (10th-13th centuries A.D.), with their sense of space and mastery of atmosphere, appear as if contemporary with ourselves. Some examples, it is true, may disconcert by what seems a fantastic element; but then in China the shapes of actual rock and crag have often a fantastic appearance. Some allowance must also be made for the influence of calligraphy on painting, particularly in the ink-painting which is the most characteristic kind of all. For painting to the Chinese is a branch of writing, the brush being used for both; and handwriting is for the connoisseur the most prized, the most intimately expressive, of all the arts. Specimens of writing by famous calligraphists are shown in the Exhibition; and if one turns from these to the ink-paintings of bamboos or plum branches, it is easy to feel the close affinity, and how the writer and painter alike seek to communicate life to every stroke of the brush. There must be no hesitation, no fumbling, no laborious correcting; the artist before he sets to work must have in his mind the perfect image of what he means to evoke with swift decisive strokes. Far more than in Europe,

Chinese critics emphasise the need for the utmost *mental* concentration in the painter. Naturally this calligraphic element brings its dangers; it brings the temptation to give play to the ink-charged brush, to lose firm grip of reality in the forms depicted by indulging a love of swirling or sweeping movements or rich blots of black. Yet in the greatest masters we are astonished by the solidity with which mountain structure is built up by the use of conventions gradually formed and handed down, though the medium of ink and water-colours has so little of the inherent force and solidity of oils. So we have landscapes in which, as the Chinese say, one can wander, landscapes one can dwell in.

In figure-drawing we are impressed with the economy of means by which a mere contour can be made expressive of the form within. The cast shadow, that ready help in suggesting relief, is never used. Yet Chinese painting is rarely a flat pattern; the depth of space is sufficiently suggested.

And here we may note another feature of Chinese art, and that is the unique value it gives to empty spaces in design. These are not something left over; they have an integral, positive function. No other art uses this resource to the same degree or with so much felicity.

The Chinese are a literary nation; the scholar is honoured above all men. And Chinese art is intimately associated with literature, especially poetry. Associations with some well-known poem may give a sort of perfume to a picture. But painting is not literary in the bad sense of trying to express with form and colour what would be better expressed in words; the affinity with poetry is seen rather in the conception of picture-making. The painter, like the poet, finds a motive in Nature and communicates his own emotional response to it. And he relates the chosen forms to one another by bringing them into a rhythmical accord; he is not preoccupied with the representation of objects as such, still less with the complete realisation of a scene. The Chinese preference is for flowing rhythms, for sinuous lines like the movement of streams. In the later art this becomes a weakness, and cloys.

The great landscapes are often steeped in a poetic mood. The love of space and solitude is conspicuous. But while these are touched with a certain solemnity, there is apparent throughout Chinese art a gift for happiness; a humorous playfulness and gaiety will unexpectedly show themselves; and behind it all is a genial humanity.

An affinity with literature may be found also in that form of painting which is peculiar to China (though borrowed by Japan), the long horizontal scroll; for this is the common form of manuscripts. We are so accustomed to the framed picture that we may not appreciate at first this form, especially as to enjoy it rightly the picture must be gradually unrolled and a foot or two only contemplated at a time. But it is a delightful form; by this means one can not only wander through a vast tract of country in imagination, or follow the progress of a great river (as in the 'River of a Myriad Miles' by Hsia Kuei, lent to the

Exhibition by the Chinese Government), one can also appreciate the succession of movements, contrasted yet continuous, the arrests and expansions, the range of tones from faint silver to deepest black, which have often prompted a comparison with the elaborate symphonies of Western music.

The visitor to the Exhibition must not suppose that the array of pictures, or any array that could be assembled anywhere to-day, is representative of the whole of Chinese painting. Even pictures of the Sung period are rare; but of the period preceding it, the T'ang period (7th-10th centuries A.D.), almost nothing authentic has survived from the ravages of Time and from wholesale destruction. And yet the concurring testimony of critics and historians assures us that this was the grandest period of Chinese painting. It was the era of immense religious frescoes, to which, above all, Wu Tao-tzŭ, by common consent the greatest of the Chinese masters, devoted his genius. It was also the time in which landscape art was matured.

Of the Buddhist painting of this period we can form some conception from the early Japanese pictures, closely modelled on Chinese examples, and, in the case of the latter part of the period, from frescoes still existing at Tun-huang on the Western frontier, and from the numerous silk-paintings recovered from that site by Sir Aurel Stein and Professor Pelliot and now in the British Museum, in Delhi, and in Paris; but these are all more or less provincial in character. The British Museum has also the good fortune to possess the rarest of treasures, a painting that dates from an even earlier time than the T'ang period, a work of exquisite refinement and subtle vitality.

Of the art of the T'ang and earlier dynasties we can judge better from sculpture and ceramics than from painting. Sculpture in China has not the esteem it has in Europe. It was the work of artisans. It is mainly Buddhist. Animal motives rather than the human form inspired the more purely Chinese sculpture. Characteristic of the later Han period (1st and 2nd centuries A.D.) are low reliefs and incised slabs, remarkable for their sense of movement, depicting ceremonies, processions, combats, etc.

The Buddhist sculpture was founded, indirectly or directly, on Indian formula, modified by Chinese tendencies in design. It is extremely interesting to follow the gradual transformations of this Buddhist sculpture as the religion spread eastward over Asia. The images made at the beginning of the Christian era in Gandhara, outside the North-West frontier of India, were the work of Bactrian sculptors still preserving Hellenistic traditions. The Greek element persists in the cast of draperies, but the types become more and more Indianised. Then the art passes into China, and by the fifth century has become in all essentials the antithesis of Græco-Roman naturalism. The slender figures of the Wei dynasty (4th-6th centuries) are images in which the sculptor has no concern with actual human form and its proportions, but dissolves material into idea, concentrating his powers on the

re-creation of the material into a form that shall be as expressive as possible of super-human serenity and compassion. Lines are prolonged in a stream-like flow, suggesting something infinite. The affinities of this art are with the statues on the Gothic cathedrals, not with classic sculpture.

With the T'ang dynasty, that era of the greatest expansion that the Chinese empire has known, when there was free communication between the East and West of Asia and with India, there comes a change. While the secular art, as we see from the pottery figures, recovered during the present century from tombs, was characterised by an extraordinary virility and a new robustness, Buddist art was now directly influenced from India by the sculpture of the classic Gupta period. The images became grander and more massive. Numerous stone statues have survived. The bronze statues were mostly destroyed or melted down in the eighth century, during a brief phase of persecution of Buddhism.

When we speak of Chinese bronzes, however, we think not of Buddhist images, but rather of the ritual vessels which have survived from far remoter times. These impress by a force which seems as if actually indwelling in the powerful and massive forms, sometimes incorporating the shapes of animals or fabulous monsters, and communicating a sense of the terror and mystery in Nature. The bronzes may well be studied with profit by our metal-workers, as our potters have profited already by study of the earlier pottery. And it is, after all, in the ceramics that the plastic sense of the Chinese is most fully and variously manifested. Also, because of the comparative abundance of authentic material, this is the art in which the successive phases of Chinese taste and style can best be followed continuously through all the centuries of our era.

Just as the painters seem to have entered into the life of bird or flower or tree, so that they paint it, so to speak, from the inside, the potters enter into and assimilate the genius of their material; and the shapes that grow up under their hands—at least, in the great periods—appear to have acquired a destined form like fruit that swells to ripeness from within. The breadth and power of T'ang style, the reserve and purity of Sung, the coloured splendour of Ming, the dainty elegance of the later periods, each can be appreciated in turn; each is an index to the art of its time. Appealing to the senses alike of sight and touch, the finest of the bowls and vases see mat the same time to transcend the world of sense and to speak in some subtle and secret way to the emotions of the spirit.

LAURENCE BINYON

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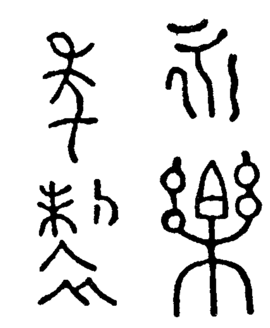
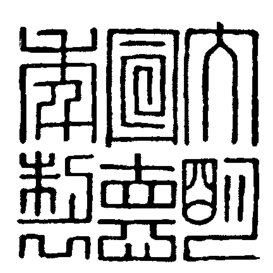
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Chia-ch'ing	1796–1821

REIGN MARKS AND DATES

大清順治年製



Shun-chih, 1644-1661

大清康熙年製



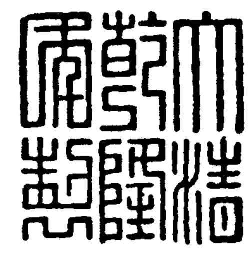
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大清乾隆年製



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嘉慶年製



Chia-ch'ing, 1796-1821

THE CATALOGUE

THE CATALOGUE

1 Vase of funerary type with design of coiling spirals in purple and black. H. 42·5 cm. Period of Yang-shao (prehistoric). Lent by Östasiatiska Samlingarna, Stockholm.

2 Vase of funerary type with decoration of leaves and rings in black. H. 40 cm. Period of Yang-shao (prehistoric). Lent by Östasiatiska Samlingarna, Stockholm.

3 Bowl, double handled, painted with herring-bone design. Neolithic pottery. H. 13·5 cm. Lent by M. Calmann, Paris.

4 Bowl with swag-like ornament in black. Non-funereal type. Di. 26 cm. Period of Yang-shao (prehistoric). Lent by Östasiatiska Samlingarna, Stockholm.

5 Neolithic Vase with painted men and horses. H. 18·3 cm. Lent by Oscar Raphael, London.

6 Yen (steamer); bronze inlaid with gold and silver. Inscribed. H. 44·5 cm. Attributed to Shang-Yin Dynasty. Lent by The Chinese Government.

7 Square Li (caldron); bronze. H. 23·9 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

8 Li (caldron); bronze. Inscribed. H. 15·2 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

9 Ting (caldron); bronze. Inscribed. H. 22·9 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

10 Kuei (food vessel); bronze. Inscribed. H. 16·4 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

11 Ting (caldron); bronze. Inscribed. H. 24·5 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

12 Tsun (wine vessel); bronze. Inscribed. H. 25·9 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

13 Kuei (food vessel); bronze. H. 12·7 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

14 Chia (wine vessel); bronze. Inscribed. H. 33·9 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

15 Vase, brown pottery, with double loop handles. H. 16·4 cm. Shang-Yin Dynasty. Lent by Professor W. Perceval Yetts, O.B.E., London.

16 Kuei (food vessel); bronze. Inscribed. H. 12·5 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

17 Tsun (wine vessel); bronze. Inscribed. H. 20·6 cm. Early Chou Dynasty. Lent by The Chinese Government.

18 Kuei (food vessel); bronze. Inscribed. H. 13·8 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

19 Yu (wine vessel); bronze. Inscribed. H. 24·5 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

20 Square Kuei (food vessel); bronze. Inscribed. H. 20·6 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

21 Square Yen (steamer); bronze. H. 40 cm. Chou Dynasty. Lent by The Chinese Government.

22 Yu (wine vessel) with spout; bronze. Inscribed. H. 24·1 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

23 Ting (caldron); bronze. Inscribed. H. 24·7 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

24 Ho (wine vessel); bronze. Inscribed. H. 28·5 cm. Shang-Yin Dynasty. Lent by The Chinese Government.

25 Square Tsun (wine vessel); bronze. Inscribed. The vessel has eight flanges. On the shoulder four elephant and four stag heads are modelled. H. 48·2 cm. Shang-Yin Dynasty or later. Lent by The Chinese Government.

26 P'ou (? wine vessel); bronze. H. 20 cm. Shang-Yin or Chou Dynasty. Lent by The Chinese Government.

27 Hu (wine vessel); bronze. Inscribed. H. 33·3 cm. Period of the Spring and Autumn Annals (perhaps body restored later). Lent by The Chinese Government.

28 Square Ting (caldron); bronze. Inscribed. H. 27·5 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

29 P'ou (? wine vessel); bronze. H. 17·6 cm. Shang-Yin or Chou Dynasty. Lent by The Chinese Government.

30 Square Ho (wine vessel); bronze. Cover missing. H. 17·5 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

31 Ho (wine vessel); bronze. Inscribed. H. 27·3 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

32 Square Lei (wine vessel) and cover; bronze. H. 26·4 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

33 Square Ting (caldron); bronze. Inscribed. H. 21·2 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

34 Lei (wine vessel); bronze. H. 23·2 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

35 Ting (caldron); bronze. Inscribed. H. 31·7 cm. Early Chou Dynasty. Lent by The Chinese Government

36 Ku (wine vessel); bronze. Bell, with clapper, is hung within hollow base. H. 23·7 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

37 Kuei (food vessel); bronze. Inscribed. H. 10·5 cm. Early Chou Dynasty. Lent by The Chinese Government.

38 Square Ting (caldron); bronze. Inscribed. H. 25·6 cm. Early Chou Dynasty. Lent by The Chinese Government.

39 Lei (wine vessel); bronze. H. 37 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

40 Ting (caldron); bronze. Inscribed. H. 22·1 cm. Early Chou Dynasty. Lent by The Chinese Government.

41 Ku (wine vessel); bronze. H. 24·4 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

42 Chüeh (wine vessel); bronze. The two columns join under a single cap. H. 19 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

43 Ting (caldron); bronze. Inscribed. H. 23·8 cm. 11th century B.C. Lent by The Chinese Government.

44 Ting (caldron); bronze. H. 58·6 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

45 Ting (caldron); bronze. Inscribed. H. 32·7 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

46 Chia (wine vessel); bronze. H. 34·9 cm. Shang-Yin or early Chou Dynasty. Lent by The Chinese Government.

47 Chung (bell); bronze. Modern jade knob. H. 32·6 cm. Period of the Warring States. Lent by The Chinese Government.

48 Kuei (food vessel); bronze. Inscribed. H. 15·5 cm. Early Chou Dynasty. Lent by The Chinese Government.

49 P'an (basin) with handle and spout; bronze. Figures of thirteen fish within circular zone inside the vessel. L. 46 cm. Early Chou Dynasty. Lent by The Chinese Government.

50 Yu (wine vessel); bronze. Inscribed. H. 22·8 cm. Early Chou Dynasty. Lent by The Chinese Government.

51 Tsun (wine vessel); bronze. Phoenix design. Inscribed. Hsing State. H. 17·5 cm. Early Chou Dynasty. Lent by The Chinese Government.

52 Ting (caldron); bronze. H. 74.8 cm. Early Chou Dynasty. Lent by The Chinese Government.

53 Tsun (wine vessel); bronze. Inscribed. H. 22·8 cm. Early Chou Dynasty (partly restored). Lent by The Chinese Government.

54 Ting (caldron); bronze. Inscribed. Huang State. H. 28·8 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

55 Hu (wine vessel); bronze. Inscribed. Jui State. H. 37 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

56 Ting (caldron); bronze. Inscribed. Jui State. H. 34·3 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

Eight Hsin-chêng Bronzes, discovered at Hsin-chêng, Honan Province, in 1923. The site lay within the territory of the Chêng State. From the Honan Provincial Museum. (Nos. 44, 57-62 and 105.)

57 Hu (wine vessel); bronze. H. 35 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

58 Chung (bell); bronze. Example from set of twenty-one. H. 41·5 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

59 Kuei (food vessel) and cover; bronze. H. 27·5 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

60 Fu (food vessel); bronze. H. 19·8 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

61 Li (caldron); bronze. Dragon design. H. 13 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

62 Chung (bell); bronze. Small example from set of twenty-one. H. 30 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

Four Shou Hsien Bronzes, discovered at Shou Hsien, Anhui Province, in 1933. The site was that of the capital of the Ch'u State from 241 to 222 B.C. From the Anhui Provincial Library. Nos. 63, 64, 99 and 102.

63 Tsu (chopping table); bronze. Ch'u State. H. 18·6 cm. Probably 241-222 B.C. Lent by The Chinese Government.

64 Ting (caldron) with spout; bronze. Inscribed. H. 38·5 cm. Probably 241-238 B.C. Lent by The Chinese Government.

65 Hu (wine vessel); bronze. Inscribed. H. 58·5 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

66 Po (bell); bronze. H. 58 cm. Period of Spring and Autumn Annals or Warring States. Lent by The Chinese Government.

67 Hu (wine vessel); bronze. Inscribed. H. 48·4 cm. Period of Spring and Autumn Annals or later. Lent by The Chinese Government.

68 Chung (bell); bronze. Inscribed. Jui State. H. 37 cm. Period of Spring and Autumn Annals or earlier. Lent by The Chinese Government.

69 I (ewer); bronze. Inscribed. Ch'ên State. H. 17·3 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

70 Tui (food vessel); bronze. Cover missing. Inscribed. Ch'i State. H. 10·6 cm. 384-378 B.C. Lent by The Chinese Government.

71 Hu (wine vessel); bronze. Inscribed. Tsêng State. H. 41·2 cm. Period of Spring and Autumn Annals or later. Lent by The Chinese Government.

72 Kuei (food vessel); bronze inlaid with gold and silver. Inscribed. H. 15 cm. Period of Spring and Autumn Annals or later. Lent by The Chinese Government.

73 Hsü (food vessel); bronze. Inscribed. H. 17 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

74 Hu (wine vessel); bronze. Inscribed. H. 47·7 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

75 Po (bell); bronze. H. 55 cm. Period of Spring and Autumn Annals or Warring States. Lent by The Chinese Government.

76 Po (bell); bronze. H. 57·1 cm. Period of Spring and Autumn Annals or Warring States. Lent by The Chinese Government.

77 Hu (wine vessel); bronze. Swing handle. H. 30 cm. Period of the Warring States. Lent by The Chinese Government.

78 Hsü (food vessel); bronze. Cover missing. Inscribed. L. 30·2 cm. ? Period of the Spring and Autumn Annals. Lent by The Chinese Government.

79 Hu (wine vessel); bronze. Inscribed. H. 26·5 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

80 Fu (food vessel); bronze. Cover missing. Inscribed. Ch'i State. L. 30·5 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

81 Gourd-shaped Hu (wine vessel) and cover; bronze. H. 33·5 cm. Period of the Warring States. Lent by The Chinese Government.

82 I (ewer); bronze. Figures of fish and duck inside the vessel. L. 27 cm. Period of Spring and Autumn Annals or Warring States. Lent by The Chinese Government.

83 Flat Hu (wine vessel); bronze. Inscribed. H. 26 cm. Period of the Warring States. Lent by The Chinese Government.

84 Hu (wine vessel); bronze. Birds and beasts drawn in incised line. Bosses inlaid gold and silver. H. 33 cm. Period of the Warring States. Lent by The Chinese Government.

85 I (ewer); bronze. Pendent ring on one side of body. L. 29 cm. Period of Spring and Autumn Annals or Warring States. Lent by The Chinese Government.

86 I (ewer); bronze. Inscribed. H. 13 cm. Period of the Warring States. Lent by The Chinese Government.

87 Kuei (food vessel); bronze. Inscribed. Ch'i State. H. 33 cm. 384-378 B.C. Lent by The Chinese Government.

88 Ting (caldron); bronze. Inscribed. Shih State. H. 30·2 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

89 Chung (bell); bronze. Inscribed. Wu State. H. 42·6 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

90 Hu (wine vessel); bronze. Hunting scenes. H. 37 cm. Period of the Warring States. Lent by The Chinese Government.

91 Ting (caldron); bronze. Three rings on cover which is intended to serve as a dish. H. 26 cm. Period of the Warring States. Lent by The Chinese Government.

92 Ting (caldron); bronze. H. 18·5 cm. Period of the Warring States or later. Lent by The Chinese Government.

93 Chien (basin); bronze. Coiled-serpent design. Di. 28 cm. Period of the Warring States. Lent by The Chinese Government.

94 Tou (food vessel); bronze. Cover missing. H. 17 cm. Period of the Warring States. Lent by The Chinese Government.

95 Hu (wine vessel); bronze. Phoenix and dragon design. H. 35 cm. Period of the Warring States. Lent by The Chinese Government.

96 Ting (caldron); bronze. H. 20·3 cm. Period of the Warring States. Lent by The Chinese Government.

97 Tsun (wine vessel); bronze. Animal form with a bird's head serving as cover. H. 19·3 cm. Late Chou Dynasty. Lent by The Chinese Government.

98 Square Hu (wine vessel); bronze. Inlaid with malachite. H. 46·3 cm. Period of the Warring States. Lent by The Chinese Government.

99 Fu (food vessel). Cover missing. Inscribed. Ch'u State. L. 35 cm. Probably 241-222 B.C. Lent by The Chinese Government.

100 Fu (food vessel); bronze. Cover missing. Inscribed. Chêng State. L. 28·5 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

101 Chung (bell); bronze. Inscribed. H. 20 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

102 Rectangular Tray; bronze, with chain handles. Ch'u State. 52 by 32 cm. *Circa* 241-222 B.C. Lent by The Chinese Government.

103 Min (wine vessel); bronze. Inscribed. H. 16·8 cm. Period of the Warring States. Lent by The Chinese Government.

104 Tsun (wine vessel); bronze. In bovine form. Inlaid with gold, silver and turquoise. H. 28·9 cm. Period doubtful. Lent by The Chinese Government.

105 Ting (caldron) and cover; bronze. Coiled-serpent design. H. 49 cm. Period of the Spring and Autumn Annals. Lent by The Chinese Government.

106 Tsung (a ritual emblem); jade. 20·5 by 7·6 cm. Early Chou Dynasty. Lent by Oscar Raphael, London.

107 Jar; black pottery, with scroll ornaments in low relief. H. 16·5 cm. Chou Dynasty. Lent by Mrs. Margot Holmes, London.

108 Figure of Kneeling Warrior; bronze. H. 17·6 cm. Period of the Warring States. Lent by D. David-Weill, Paris.

109 Finial of a chariot pole; bronze. H. 5·7 cm. Period of the Warring States. Lent by Oscar Raphael, London.

110 Sword; bronze. From Shou Hsien. L. 64·5 cm. Han Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

111 Tiger; bronze. L. 16·8 cm. Period of the Warring States. Lent by A. Hellström, Mölndal, Sweden.

112 P'an (basin), incomplete; bronze. Fishes and turtles in relief. Di. 44 cm. Period of the Warring States. Lent by Musée du Louvre, Paris.

113 Ting (caldron) and cover; bronze. H. 17 cm.; W. 30·5 cm. Period of the Warring States. Lent by Musée du Louvre, Paris.

114 Lien (casket) and cover; bronze. H. 26·4 cm. Warring States or Han Dynasty. Lent by A. Hellström, Mölndal, Sweden.

115 Chariot Furniture, surmounted by a tiger; bronze. H. 6·3 cm.; W. 9 cm. Period of the Warring States. Lent by Oscar Raphael, London.

116 Tsung (ritual emblem); jade. H. 20·7 cm. Early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

117 Handle decorated with four heads; bronze. H. 9·5 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

118 Jar and Cover; red pottery with white slip and inlaid glass bead ornament in diced pattern interspersed with circles. H. 11·5 cm. Period of the Warring States. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

119 Sword; bronze, with turquoise-inlaid handle. L. 51·4 cm. Period of the Warring States. Lent by A. Hellström, Mölndal, Sweden.

120 Kneeling Figure wearing a mask and holding two sockets; bronze. H. 14·5 cm. Period of the Warring States. Lent by Dr. Osvald Sirén, Stockholm.

121 Hu (wine vessel); bronze. H. 31 cm. Period of the Warring States. Lent by H.R.H. The Crown Prince of Sweden.

122 Appliqué; bronze. Period of the Warring States. Lent by J. Homberg, Paris.

123 Lien (casket) and cover; bronze. Di. 22·8 cm. Han Dynasty. Lent by Mrs. Christian R. Holmes, New York.

124 Hu (wine vessel) and cover; bronze. Inscribed. H. 16·6 cm. Period of the Warring States. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

125 Appliqué; bronze, with animal forms. L. 8·8 cm.; W. 9·2 cm. Period of the Warring States. Lent by H. J. Oppenheim, London.

126 Kneeling Figure; bronze. H. 25 in. *Circa* 5th century B.C. Lent by Raymond A. Bidwell, Springfield, Mass.

127 Yu (wine vessel); bronze. Band of convoluted pattern. L. 22·2 cm. Period of the Warring States. Lent by Östasiatiska Samlingarna, Stockholm.

128 To (bell) with long handle; bronze. H. w. std. 38·6 cm. Period of the Warring States. Lent by Baron Kichizayemon Sumitomo, Kyoto.

129 Horse; bronze. L. 18·6 cm. Han Dynasty. Lent by A. Hellström, Mölndal, Sweden.

130 Axe decorated with elephant and other animals; bronze. L. 14·6 cm.; W. 11·1 cm. Period of the Spring and Autumn Annals. Lent by Oscar Raphael, London.

131 Gourd-shaped Hu (wine vessel) and cover; bronze. H. 32·7 cm. Period of the Warring States. Lent by A. Hellström, Mölndal, Sweden.

132 Ting (caldron) and cover; bronze. H. 22·1 cm. Period of the Warring States. Lent by The Arts and Crafts Museum, Gothenburg.

133 Hu (wine vessel) and cover; bronze. Inscribed. H. 48·2 cm. Period of the Warring States. Lent by Edgar Worch, Geneva.

134 Tsun (wine vessel); bronze, in the form of a goose. Inlaid with turquoise. H. 24·7 cm. Perhaps Chou Dynasty. Lent by C. T. Loo, Paris.

135 Oval Vessel with figures of two frogs; bronze. L. 24·1 cm. Han Dynasty or later. Lent by Mrs. Christian R. Holmes, New York.

136 Mythical Quadruped; bronze, with surface decoration of geometric designs. L. 21 cm. Period of the Warring States. Lent by H. J. Oppenheim, London.

137 Lock; bronze. 19·6 by 13·2 cm. Period of the Warring States. Lent by Major-General Sir Neill Malcolm, K.C.B., D.S.O., London.

138 Appliqué Mask; bronze. H. 19·5 cm. Period of the Warring States. Lent by Oscar Raphael, London.

139 Chung (bell); bronze, with central canon. H. 20·5 cm. Period of the Warring States. Lent by Mrs. Christian R. Holmes, New York.

140 Hu (wine vessel); bronze, with bands of interlaced phoenixes. H. 35·5 cm. Period of the Warring States. Lent by Dr. E. Hultmark, Stockholm.

141 Wheel-hub; bronze, with broad band of coiled-serpent forms. Di. 13·8 cm. Period of the Warring States. Lent by A. Hellström, Mölndal, Sweden.

142 Flat Hu (wine vessel); bronze. Inlaid with gold and silver. H. 26·5 cm. Period of the Warring States. Lent by G. Pilster, Berlin.

143 Pole Shaft; bronze, with two hares. L. 25·9 cm. Han Dynasty. Lent by A. Hellström, Mölndal, Sweden.

144 Ch'un (bell); bronze. H. 38 cm. Period of the Warring States. Lent by Östasiatiska Samlingarna, Stockholm.

145 Lei (wine vessel); bronze. Inscribed. H. 25 cm. Period of the Spring and Autumn Annals. Lent by Professor and Mrs. C. G. Seligman, Toot Baldon, Oxford.

146 T'ao-T'ieh (Ogre) Mask; openwork bronze. H. 27 cm.; W. 3·25 cm. Chou Dynasty. Lent by D. David-Weill, Paris.

147 I (ewer); bronze. Inscribed. Ch'u State. L. 38 cm. Chou Dynasty. Accompanies No. 158. Lent by Mr. and Mrs. Walter Sedgwick, London.

148 Pair of Pole Finials; bronze, in the form of a mule's head. H. 14·5 cm. Period of the Spring and Autumn Annals. Lent by G. Eumorfopoulos, London.

149 Axe-head; bronze. L. 12·8 cm. Period of the Warring States. Lent by The British Museum (Eumorfopoulos Collection).

150 Disk; gold foil. Di. 17 cm. Period of the Warring States. Lent by Östasiatiska Samlingarna, Stockholm.

151 Plaque; bronze, in the form of a tiger with an antelope. Pair with No. 161. 15·1 by 9·9 cm. Han Dynasty. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

152 Ceremonial Shaft-head; bronze, with head and animal decoration. H. 17 cm. Chou Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

153 Pair of Buckles; gold. H. 3 cm.; W. 3·6 cm. Period of the Warring States. Lent by The British Museum (Eumorfopoulos Collection).

154 Dagger-hilt; gold. H. 9·5 cm.; W. 5·5 cm. Period of the Warring States. Lent by The British Museum (Eumorfopoulos Collection).

155 Sword; bronze, with engraved dragon. L. 56·5 cm. Lent by A. Hellström, Mölndal, Sweden.

156 Fu (food vessel); bronze. H. 22 cm. Chou Dynasty. Lent by C. T. Loo, Paris.

157 Hinge with human face; bronze. H. 2·9 cm. Chou Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

158 P'an (basin); bronze. Inscribed. Ch'u State. W. 43·8 cm. Chou Dynasty. Accompanies No.

147. Lent by Mr. and Mrs. Walter Sedgwick, London.

159 Butt of a Halberd (*ko*); bronze. L. 15 cm. Period of the Warring States. Lent by Östasiatiska Samlingarna, Stockholm.

160 Lock; bronze. H. 14·6 cm.; W. 11 cm. Period of the Warring States. Lent by D. David-Weill, Paris.

161 Plaque; bronze, in the form of a tiger with an antelope. Pair with No. 151. 15·2 by 11·7 cm. Han Dynasty. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

162 Ho (wine vessel); bronze. H. 31·7 cm. Chou Dynasty. Lent by The German State Museums, Berlin.

163 Kuei (food vessel) with square stand; bronze. Inscribed, but inscription erased. H. 25·7 cm. Period of the Spring and Autumn Annals. Lent by A. Stoclet, Brussels.

164 Tsung (a ritual emblem); jade. H. 39·8 cm. Early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

165 Tsun (wine vessel) in the shape of an elephant-like animal; bronze. Inscribed. H. 26 cm. Chou Dynasty. Lent by H. G. Oeder, Altmark, Germany.

166 Hu (wine vessel); bronze. Hunting scenes, animals and birds. H. 25·7 cm. Period of the Warring States. Lent by A. Stoclet, Brussels.

167 T'ao-T'ieh (Ogre) Mask; bronze. H. 6·6 cm.; W. 7 cm. Period of the Spring and Autumn Annals. Lent by Oscar Raphael, London.

168 Chio (wine vessel) and cover; bronze. Inscribed. H. 19·3 cm. Early Chou Dynasty. National Treasure B. Lent by Matasaku Shiohara, Tokyo.

169 Halberd Head (*ko*); bronze. L. 28·6 cm. Period of the Warring States. Lent by A. Hellström, Mölndal, Sweden.

170 Spear Head; bronze. L. 27·9 cm. Period of the Warring States. Lent by Oscar Raphael, London.

171 Pi (ritual disk); black and green jade. Di. 21·8 cm. Shang-Yin Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

172 Spear Head; bronze. L. 28 cm. Period of the Warring States. Lent by Malmö Museum, Malmö, Sweden.

173 Spear Head; jade, with copper turquoise-encrusted socket. H. 19·8 cm. Shang-Yin Dynasty. Lent by Oscar Raphael, London.

174 Axe; jade. H. 24 cm.; W. 17·6 cm. Early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

175 Spear Head, with nielloed diaper pattern; bronze. L. 27·4 cm. Period of the Warring States. Lent by D. David-Weill, Paris.

176 Spear Head, with incised dragon design on lower half; bronze. L. 21 cm. Period of the Warring States. Lent by Madame Ramet, Paris.

177 Ceremonial Axe; bronze; leopard in relief. L. 19·5 cm.; W. 12·2 cm. Shang-Yin or early Chou. Lent by C. A. Piek, Bussum, Holland.

178 Yu (wine vessel); bronze. Inscribed. From the Tuan Fang Collection. H. 34 cm. Shang-Yin or early Chou Dynasty. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

179 T'ao-T'ieh (Ogre) Mask; bronze. H. 14·2 cm.; W. 16·3 cm. Period of the Spring and Autumn Annals. Lent by D. David-Weill, Paris.

180 Square Hu (wine vessel); bronze. Inlaid with malachite. Inscribed. H. 37·5 cm. Period of the Warring States. Lent by University Museum, University of Pennsylvania.

181 Chung (bell); bronze. H. 54·5 cm. Period of the Warring States. Lent by A. Stoclet, Brussels.

182 Tsun (wine vessel); bronze. Inscribed. H. 30·5 cm. Early Chou Dynasty. From the Collection of Charles L. Rutherston. Lent by Mrs. C. L. and Miss Rutherston, Farnham and London.

183 Ting (caldron); bronze. Inscribed. H. 18·8 cm. Shang-Yin or early Chou Dynasty. Lent by W. van der Mandele, Bloemendaal, Holland.

184 Ku (wine vessel); bronze. *K'uei* dragon decoration. H. 26 cm. Early Chou Dynasty. Lent by H. K. Burnet, Bradford.

185 Chih (wine vessel); bronze. H. 19·3 cm. Early Chou Dynasty. Lent by A. Hellström, Mölndal, Sweden.

186 Recumbent Buffalo; bronze. H. 11·5 cm.; L. 20 cm. Period of the Spring and Autumn Annals. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

187 Tsun (wine vessel); bronze, with handle. Inscribed. H. 21·6 cm. Shang-Yin or early Chou Dynasty. Lent by John Sparks, London.

188 Li (caldron); bronze. H. 15·5 cm. Early Chou or Han Dynasty. Lent by Mrs. Christian R. Holmes, New York.

189 Lynch-pin; bronze, in the form of a ram's head. H. 15·2 cm. Period of the Spring and Autumn Annals. Lent by Major-General Sir Neill Malcolm, K.C.B., D.S.O., London.

190 Jingle; bronze. The centre piece is decorated with designs of animals in relief. L. 33·4 cm. Period of the Spring and Autumn Annals. Lent by H. J. Oppenheim, London.

191 Lynch-pin; bronze, in the form of a human figure. H. 15·8 cm. Early Chou Dynasty. Lent by Major-General Sir Neill Malcolm, K.C.B., D.S.O., London.

192 Spoon with dragon ornament; bronze. L. 28·7 cm. Period of the Warring States. Lent by A. Hellström, Mölndal, Sweden.

193 Plaque with human head; bronze. H. 7 cm.; W. 6·7 cm. Period of the Spring and Autumn Annals. Lent by Östasiatiska Samlingarna, Stockholm.

194 Ko Blade; bronze. L. 29·5 cm. Shang-Yin Dynasty. Lent by D. David-Weill, Paris.

195 Hu (wine vessel) and cover; bronze. H. 37 cm. Period of the Spring and Autumn Annals. Lent by D. David-Weill, Paris.

196 Yu (wine vessel); bronze. Inscribed. H. 34·5 cm. Shang-Yin Dynasty. Lent by M. W. van der Mandele, Bloemendaal, Holland.

197 Axe Head; bronze. H. 30·1 cm.; W. 32 cm. Early Chou Dynasty. Lent by D. David-Weill, Paris.

198 Ting (caldron); bronze. H. 18·2 cm. Shang-Yin Dynasty. Lent by A. Hellström, Mölndal, Sweden.

199 Yu (wine vessel); bronze. Inscribed. H. 24·5 cm. Shang-Yin Dynasty. Lent by G. Eumorfopoulos, London.

200 Rectangular Four-legged Ting (caldron); bronze. Inscribed. H. 22·2 cm. Early Chou Dynasty. Lent by A. Stoclet, Brussels.

201 Ku (wine vessel); bronze. Inscribed. H. 30 cm. Shang-Yin Dynasty. Lent by Miss M. L. Hambleton, Crawley, Sussex.

202 I (casket-shaped vessel); bronze. Inscribed. H. 21 cm. Shang-Yin Dynasty. Lent by Mr. and Mrs. Walter Sedgwick, London.

203 Yu (wine vessel); bronze. Inscribed. H. 24·7 cm. Shang-Yin or early Chou Dynasty. Lent by H. G. Oeder, Altmark, Germany.

204 Jingle; bronze, with horses' heads and inlaid turquoise decoration. L. 33·7 cm. Early Chou Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

205 Chih (wine vessel); bronze. Inscribed. H. 14·5 cm. Shang-Yin Dynasty. Lent by Mr. and Mrs. Walter Sedgwick, London.

206 Jingle; bronze, with two human heads in relief, inlaid with turquoise. L. 35·5 cm. Period of the Spring and Autumn Annals. Lent by Mrs. Margot Holmes, London.

207 Ko; yellow jade, with bronze handle. L. 28 cm. Shang-Yin Dynasty. Lent by A. Hellström, Mölndal, Sweden.

208 Ko; with bronze and turquoise handle; jade blade. L. 22·6 cm. Early Chou Dynasty. Lent by Oscar Raphael, London.

209 Ko; bronze handle inlaid with turquoise; jade blade. L. 27·3 cm. Shang-Yin Dynasty. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

210 Chêng (bell); bronze. H. 36 cm. Early Chou Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

211 Kuei (food vessel); bronze. Inscribed. H. 17·2 cm. Chou Dynasty. Lent by A. Hellström, Mölndal, Sweden.

212 Chio (wine vessel); bronze. Cover in form of a bird. Inscribed. H. 25·5 cm. Shang-Yin or early Chou Dynasty. Lent by Mrs. Christian R. Holmes, New York.

213 Yu (wine vessel); bronze. Inscribed. H. 30·5 cm. Chou Dynasty. Lent by The Victoria and Albert Museum (Eumorfopoulos Collection).

214 Kuei (food vessel); bronze. Inscribed. H. 15·3 cm. Shang-Yin Dynasty. Lent by Madame Wannieck, Paris

215 Chüeh (wine vessel). bronze. Bird ornament. H. 23·5 cm. Shang-Yin Dynasty. Lent by A. Hellström, Mölndal, Sweden.

216 Ting (caldron); bronze, with black inlay. Inscribed. H. 32 cm. Shang-Yin Dynasty. Lent by E. M. B. Ingram, C.M.G., Rome.

217 Group; bronze; wrestlers. H. 15·3 cm.; W. 15·3 cm. Chou Dynasty. Lent by Captain E. G. Spencer-Churchill, Blockley, Worc.

218 Three Portions of a Dragon; ivory. L. 9·4 cm., 4·7 cm., 3·2 cm. Shang-Yin Dynasty. Lent by Mrs. Margot Holmes, London.

219 Hu (sceptre); bone. L. 46 cm. Shang-Yin Dynasty. Lent by L. Michon, Paris.

220 Bird; bone, inlaid with turquoise. H. 11·2 cm. Shang-Yin Dynasty. Lent by A. Stoclet, Brussels.

221 Dragon Head; bone. H. 11 cm. Early Chou Dynasty. Lent by M. Calmann, Paris.

222 Hair-pin; bone. L. 11·5 cm. Early Chou Dynasty. Lent by C. T. Loo, Paris.

223 Spatula; bone. L. 17·7 cm. Shang-Yin Dynasty. Lent by H. K. Burnet, Manningham, Yorks.

224 Carved Bone. H. 16·4 cm.; W. 8·6 cm. Shang-Yin Dynasty. Lent by Raymond A. Bidwell, Springfield, Mass.

225 Snaffle; painted bone. W. 14 cm. Shang-Yin Dynasty. Lent by Heinrich Hardt, Berlin.

226 Bone Hair-pin. H. 14 cm. Shang-Yin Dynasty. Lent by Östasiatiska Samlingarna, Stockholm.

227 Food Vessel; grey pottery with impressed lozenge pattern. H. 22·5 cm. Perhaps Chou Dynasty. Lent by The Victoria and Albert Museum (Eumorfopoulos Collection).

228 Tripod Vessel; grey pottery with mat marking on exterior. H. 15·5 cm. Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

229 Chêng (bell); bronze. H. 26·6 cm. Early Chou Dynasty. Lent by Mrs. Christian R. Holmes, New York.

230 Kuei (food vessel) with four handles; bronze. Elephant design. Inscribed. H. 19 cm. Early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

231 Frontal for Horse Armour. H. 31·5 cm. Early Chou Dynasty. Lent by Oscar Raphael, London.

232 Chia (wine vessel) and cover; bronze. H. 35 cm. Shang-Yin or early Chou Dynasty. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

233 Fifteen Jade Beads found in the bronze *yu* No. 234. Chou Dynasty. Lent by Mrs. Christian R. Holmes, New York.

234 Yu (wine vessel); bronze. Handle missing. H. 22·3 cm. Early Chou Dynasty. Lent by Mrs. Christian R. Holmes, New York.

235 Three Buttons; turquoise. Di. 4 cm. Shang-Yin Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

236 Tsun (wine vessel); bronze. In the form of an owl. H. 21·3 cm. Chou Dynasty. Lent by The Victoria and Albert Museum (Eumorfopoulos Collection).

237 Ladle; bronze. L. 23·5 cm. Period of the Spring and Autumn Annals. Lent by A. Stoclet, Brussels.

238 Yu (wine vessel); bronze. In form of a tiger clasping a man. Early Chou Dynasty. H. 35·5 cm. Japanese National Treasure B. Lent by Baron Kichizayemon Sumitomo, Kyoto.

239 Model of a Helmet; bronze. H. 5·8 cm. Shang-Yin Dynasty. Lent by A. Schoenlicht, The Hague.

240 Lei (wine vessel) and cover; bronze. Inscribed. H. 50·7 cm. Shang-Yin Dynasty. Lent by Kaichiro Nedzu, Tokyo.

241 Ting (caldron); bronze. Band of cicada pattern with black inlay. H. 23·3 cm. Shang-Yin Dynasty. Lent by Östasiatiska Samlingarna, Stockholm.

242 Finial of an axe handle with human head; bronze. H. 7 cm. Chou Dynasty. Lent by Oscar Raphael, London.

243 Yu (wine vessel); bronze. In form of a tiger clasping a man. H. 35·5 cm. Lent by Musée Cernuschi, Paris.

244 Chair Foot; bronze. H. 8·8 cm.; L. 18 cm. Shang-Yin Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

245 Halberd, with rams' heads and meander pattern; bronze. L. 48·3 cm. Shang-Yin Dynasty. Lent by Oscar Raphael, London.

246 Yu (wine vessel); bronze. Inscribed. Shang-Yin or early Chou Dynasty. H. 26·6 cm. Lent by Kaichiro Nedzu, Tokyo.

247 I (casket-shaped vessel); bronze. Inscribed. H. 36 cm. Early Chou Dynasty. From the Lucy Maud Buckingham Collection, Chicago.

248 Rectangular Ting (caldron); bronze. *K'uei* dragon decoration. Inscribed. H. 22·2 cm. Shang-Yin or early Chou Dynasty. Lent by The Earl of Elgin and Kincardine, K.T., C.M.G., Dunfermline.

249 Halberd (*ko*); bronze. Tortoise design at handle end of the blade. L. 24 cm. Early Chou Dynasty. Lent by Mrs. Margot Holmes, London.

250 Tsung (ritual emblem); golden-brown jade. H. 6·6 cm.; W. 9 cm. Early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

251 Ting (caldron); bronze. H. 18 cm. Shang-Yin Dynasty. Lent by A. Hellström, Mölndal, Sweden.

252 One Foot of a Tripod; marble. H. 19·5 cm. Shang-Yin Dynasty. Lent by Östasiatiska Samlingarna, Stockholm.

253 Kuang (wine vessel) and ladle; bronze. Interior partitioned. Inscribed. L. 21 cm. Early Chou Dynasty. Lent by Oscar Raphael, London.

254 Vessel in the form of a pheasant; bronze. Inscribed. H. 17 cm. Early Chou Dynasty. Lent by C. T. Loo, Paris.

255 Chih (wine vessel) and cover; bronze. H. 17 cm. Shang-Yin or early Chou Dynasty. Lent by W. van der Mandele, Bloemendaal, Holland.

256 Yu (wine vessel); bronze. Handle missing. H. 15·5 cm. Early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

257 Ku (wine vessel); bronze. Openwork base Inscribed. H. 13·8 cm. Shang-Yin or early Chou Dynasty. Lent by Mrs. Margot Holmes, London.

258 Li (caldron); bronze. H. 30 cm. Shang-Yin Dynasty. Lent by M. Calmann, Paris.

259 Kuang (wine vessel); bronze. H. 23·5 cm. Shang-Yin Dynasty. Lent by L. Michon, Paris.

260 Tsun (wine vessel); bronze. In the form of two rams. H. 45·5 cm. Shang-Yin or early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

260a Kuei (food vessel); bronze. Inscribed. H. 24 cm. Early Chou Dynasty. Lent by Major-General Sir Neill Malcolm, K.C.B., D.S.O., London.

261 Tiger Head; stone. H. 15·2 cm. Shang-Yin Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

262 Chüeh (wine vessel) and cover; bronze. H. 24·4 cm. Shang-Yin or early Chou Dynasty. Lent by Mrs. William H. Moore, New York.

263 Axe (*ch'i*); bronze. Blade ornamented with two confronted animals and, below, a row of five cicadas. Inscribed. H. 23·5 cm. Shang-Yin Dynasty. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

264 Double Bull's Head; mottled marble. H. 5·3 cm.; L. 12 cm. Shang-Yin Dynasty. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

265 Litter Fitting; bronze. H. 20·5 cm. Early Chou Dynasty. Lent by Major-General Sir Neill Malcolm, K.C.B., D.S.O., London.

266 Hair Ornament; jade. 6·9 by 7·8 cm. Early Chou Dynasty. Lent by Oscar Raphael, London.

267 AXE (*ch'i*); bronze. H. 25 cm.; W. 19·7 cm. Shang-Yin Dynasty. Lent by H. J. Oppenheim, London.

268 LOWER HALF OF HUMAN FIGURE in carved limestone. H. 22·5 cm. Shang-Yin Dynasty. Found at An-yang. Lent by The Chinese Government.

268A BUFFALO; limestone. H. 11·5 cm.; L. 21 cm. Shang-Yin Dynasty. Lent by Mr. and Mrs. Walter Sedgwick, London.

269 TIGER MASK; stone. 23 by 25·5 cm. Shang-Yin Dynasty. Lent by G. Eumorfopoulos, London.

270 PIGEON PENDANT; jade. H. 3·2 cm.; L. 3·6 cm. Early Chou Dynasty. Lent by Chang Nai-chi, Shanghai.

271 PIGEON PENDANT; jade. L. 3·8 cm. Early Chou Dynasty. Lent by Chang Nai-chi, Shanghai.

272 BUFFALO; pale grey jade. H. 2·5 cm.; L. 4·7 cm. Early Chou Dynasty. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

273 BUFFALO; white jade. H. 2·6 cm.; L. 4·5 cm. Early Chou Dynasty. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

274 GIRDLE ORNAMENT (*p'ei*); jade. L. 5 cm. Early Han Dynasty. Lent by Chang Nai-chi, Shanghai.

275 BUFFALO; buff-coloured jade; stylised surface decoration. L. 4·5 cm. Early Chou Dynasty. Lent by H. J. Oppenheim, London.

276 BIRD FIGURE; turquoise matrix. H. 4·4 cm. Early Chou Dynasty. Lent by Mr. and Mrs. Walter Sedgwick, London.

277 BUTTON; mother-of-pearl. Di. 4·5 cm. Early Chou Dynasty. Lent by M. Calmann, Paris.

278 OWL; jade. H. 5 cm. Early Chou Dynasty. Lent by Mr. and Mrs. Walter Sedgwick, London.

279 ELEPHANT HEAD FINIAL; jade. L. 4·5 cm. Shang-Yin Dynasty. Lent by Chang Nai-chi, Shanghai.

280 TIGER; jade. L. 6 cm. Shang-Yin Dynasty. Lent by Chang Nai-chi, Shanghai.

281 BUFFALO HEAD CHARM; glass. L. 3·3 cm. Han Dynasty. Lent by Chang Nai-chi, Shanghai.

282 RAM'S HEAD; buff jade with red pigment. H. 3·8 cm. Period of the Spring and Autumn Annals. Lent by H.R.H. The Crown Prince of Sweden.

283 SITTING BEAR; jade. H. 4·5 cm. Early Chou Dynasty. Lent by M. Calmann, Paris.

284 GIRDLE ORNAMENT (*p'ei*); jade. L. 4·2 cm. Han Dynasty. Lent by Chang Nai-chi, Shanghai.

285 HÊNG (girdle ornament); pale green jade. L. 9·4 cm. Early Chou Dynasty. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

286 FISH CHARM; jade. L. 9·6 cm. Period of the Spring and Autumn Annals. Lent by Chang Nai-chi, Shanghai.

287 FISH PENDANT; jade. H. 8·3 cm. Period of the Spring and Autumn Annals. Lent by H.R.H. The Crown Prince of Sweden.

288 BLADE; black jade. L. 4·3 cm.; W. 10·2 cm. Pre-Han. Lent by Oscar Raphael, London.

289 FISH; jade, hoop-shaped and carved in low relief. L. 7·8 cm. Early Chou Dynasty. Lent by H. J. Oppenheim, London.

290 HÊNG (girdle ornament); pale green jade. L. 9·7 cm. Early Chou Dynasty. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

291 CROUCHING STAG; jade. H. 8 cm. Period of the Warring States. Lent by M. Calmann, Paris.

292 KUEI (symbol of authority); mottled green and brown jade. L. 43·7 cm.; W. 6·8 cm. Shang-Yin Dynasty. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

293 SPEAR HEAD; jade. L. 33·7 cm. Neolithic period. Lent by The Kyoto Imperial University.

294 KNIFE; jade. L. 13 cm. Shang-Yin Dynasty. Lent by Chang Nai-chi, Shanghai.

295 SPEAR HEAD; jade. L. 10·5 cm. Period of the Spring and Autumn Annals. Lent by Chang Nai-chi, Shanghai.

296 CHANG (a symbol of authority); mottled blue-grey jade. L. 38·3 cm.; W. 9·4 cm. Early Chou Dynasty. Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

297 KUEI (symbol of authority); orange-coloured jade. L. 30·5 cm.; W. 7·2 cm. Early Chou Dynasty. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

298 STAFF; jade, with incised dragons and phoenix. From the Tuan Fang Collection. 2·2 by 27·9 cm. Period of the Spring and Autumn Annals. Lent by Oscar Raphael, London.

299 FIGURE OF A KNEELING MAN; jade. L. 6·3 cm. Period of the Spring and Autumn Annals. Lent by The British Museum (Eumorfopoulos Collection).

300 ORNAMENT; jade, in form of a woman with a child on her back. H. 8·1 cm. Period of the Spring and Autumn Annals. Lent by Mrs. Christian R. Holmes, New York.

301 PLAQUE; jade, stylised owl. H. 11·5 cm. Shang-Yin Dynasty. Lent by G. Eumorfopoulos, London.

302 TIGER in matrix of turquoise. L. 5·1 cm. Early Chou Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

303 CORMORANT; grey jade. H. 4·4 cm.; L. 6·5 cm. Period of the Spring and Autumn Annals. Lent by The British Museum (Eumorfopoulos Collection).

304 ANIMAL HEAD in relief; jade. H. 3·4 cm.; W. 2·6 cm. Early Chou Dynasty. Lent by Chang Nai-chi, Shanghai.

305 PI (ritual disk); black jade. Di. 15·2 cm. Early Chou Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

305A RITUAL KNIFE; jade. L. 12·5 cm. Early Chou Dynasty. Lent by Museum für Ostasiatische Kunst, Cologne.

306 FIGURE OF MAN wearing a mask; jade. H. 5 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

307 STAFF; white jade. L. 2·6 cm. Period of the Spring and Autumn Annals. Lent by The British Museum (Eumorfopoulos Collection).

308 KUEI (symbol of authority); jade. L. 30·5 cm. Early Chou Dynasty. With designs and Imperial inscriptions of the Ch'ien-lung period. Lent by The Chinese Government.

309 RITUAL KNIFE; green jade. L. 35 cm. Shang-Yin Dynasty. Lent by The Victoria and Albert Museum (Eumorfopoulos Collection).

310 DAGGER with bird handle; jade. L. 14·2 cm. Early Chou Dynasty. Lent by Mrs. Christian R. Holmes, New York.

311 KNIFE; jade. L. 17 cm. Shang-Yin Dynasty. Lent by Chang Nai-chi, Shanghai.

312 SWORD; jade. L. 50·8 cm. Early Chou Dynasty. Lent by Oscar Raphael, London.

313 AXE with serrated edge; jade. H. 14·6 cm.; W. 12·3 cm. Early Chou Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

314 OWL; carved bone. H. 6 cm. Shang-Yin Dynasty. Lent by M. Calmann, Paris.

315 KNIFE; jade. L. 63·5 cm.; W. 9 cm. Early Chou Dynasty. Lent by Musée Guimet, Paris.

316 PENDANT; jade. H. 9·1 cm. Early Chou Dynasty. Lent by H.R.H. The Crown Prince of Sweden.

317 DISK; ivory-coloured jade. Each side serrated with seven notches. Di. 12·7 cm. Early Chou Dynasty. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

318 TSUN (wine vessel); bronze, in form of elephant. L. 96·5 cm. Shang-Yin or early Chou Dynasty. Lent by Musée du Louvre, Paris.

319 SET OF SACRIFICIAL WINE VESSELS AND ALTAR TABLE; bronze. Found near Pao-chi, Shensi, in 1901. Shang-Yin or early Chou Dynasty. From the Tuan Fang Collection.
CHIN (altar table). H. 18 cm.; W. 89·9 cm.
YU with stand. H. 46·9 cm.
YU. Inscribed. H. 46·4 cm.
KU. Inscribed. H. 20·9 cm.
KU. Inscribed. H. 34 cm.
HO. Inscribed. H. 28·6 cm.
CHIA. Inscribed. H. 32·4 cm.
CHÜEH. Inscribed. H. 25 cm.
CHIO. Inscribed. H. 20 cm.
CHIH. Inscribed. H. 14·5 cm.
CHIH. H. 13·8 cm.
CHIH. Inscribed. H. 14·5 cm.
CHIH. Inscribed. H. 13 cm.
Lent by The Metropolitan Museum of Art, New York.

320 HO (wine vessel); bronze. Inscribed. H. 73 cm. Shang-Yin Dynasty. Lent by Kaichiro Nedzu, Tokyo.

321 RING; ivory-coloured jade. A notched flange around the centre. Di. 8 cm. Early Chou Dynasty. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

322 ARCHER'S THUMB RING; jade. L. 4·4 cm. Period of the Warring States. Lent by Oscar Raphael, London.

323 SWORD, with lacquer scabbard. L. 85 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

324 ARCHER'S THUMB RING; turquoise. H. 4·5 cm. Han Dynasty. Lent by M. Calmann, Paris.

325 AWL HANDLE; mottled pale green and orange-coloured jade. L. 6·5 cm. Early Chou Dynasty. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

326 SPEAR HEAD; white jade. L. 20·9 cm. Period of the Spring and Autumn Annals. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

327 PARTS OF A DAGGER HANDLE; jade. L. 10 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

328 PIECE OF CARVED AND ENGRAVED JADE. H. 4·7 cm. Han Dynasty. Lent by Chang Nai-chi, Shanghai.

329 and 332 PAIR OF PENDANTS (*huang*); jade. W. 13 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

330 GIRDLE ORNAMENTS (*p'ei*); jade. A pair of geese. H. 4·8 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

331 TWO MALE FIGURES; pale green jade. H. 6·2 and 6·8 cm. Period of the Spring and Autumn Annals. Lent by Oscar Raphael, London.

332 *See* No. 329.

333 BUCKLE; jade, with the hook missing; now consisting of ten pieces. Ox-head finial. L. 14·5 cm. Early Han Dynasty. Lent by Chang Nai-chi, Shanghai.

334 CYLINDRICAL HANDLE; ivory- coloured jade. Each end engraved with a silkworm pattern. L. 15·9 cm. Period of the Warring States. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

335 ORNAMENT; jade, in the form of a bird. L. 4·4 cm. Early Han Dynasty. Lent by Chang Nai-chi, Shanghai.

336 CICADA; glass. L. 3·9 cm. Han Dynasty. Lent by Chang Nai-chi, Shanghai.

337 CICADA; white and green jade. L. 6 cm. Period of the Spring and Autumn Annals. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

338 PI (ritual disk); jade. Grain pattern. Di. 16 cm. Early Chou Dynasty. Lent by Oscar Raphael, London.

339 STAG; dull green jade. H. 5·6 cm.; L. 5·8 cm. Period of the Warring States. Lent by H. J. Oppenheim, London.

340 FIGURE OF BUCK; jade. H. 5·7 cm. Period of the Warring States. Lent by Oscar Raphael, London.

341 PI (ritual disk), with two dragons on the rim; jade. W. 21·7 cm. Period of the Warring States. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

342 BELT HOOK; jade. L. 5·3 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

343 PI (ritual disk); jade. W. 17·6 cm. Period of the Warring States. Lent by The British Museum (Eumorfopoulos Collection).

344 ARCHER'S RING; jade. H. 5·3 cm. Han Dynasty. Lent by Heinrich Hardt, Berlin.

345 STAFF; jade. L. 17·4. cm. Period of the Spring and Autumn Annals. Lent by Chang Nai-chi, Shanghai.

346 EAR PICK, with fish handle; jade. L. 6·5 cm. Han Dynasty. Lent by Chang Nai-chi, Shanghai.

347 PENDANT; jade. L. 5 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

348 HARE; jade. H. 3·1 cm. L. 5·8 cm. Period of the Warring States. Lent by Oscar Raphael, London.

349 WOVEN GOLD CHAIN, with two amber and two jade beads; a pearl set in the fastening. L. 71 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

350 PIERCED PENDANT; jade; two confronted phoenixes and two dragons. H. 5·6 cm.; W. 6·6 cm. Period of the Warring States. Lent by The William Rockhill Nelson Gallery of Art, Kansas City.

351 CORMORANT AND FISH; jade. H. 4 cm.; W. 4·3 cm. Han Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

352 STAFF; ivory-coloured jade. L. 22·8 cm. Period of the Spring and Autumn Annals. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

353 INCISED BELT ORNAMENT; jade. Archaic inscription on the reverse. L. 3·4 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

354 FINGER RING; jade. H. 3·7 cm. Han Dynasty. Lent by Heinrich Hardt, Berlin.

355 BEAD; jade. L. 6·4 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

356 RITUAL PENDANT in the form of a dragon; jade. Pair with No. 360. H. 8 cm.; L. 15·1 cm. Period of the Warring States. Lent by Oscar Raphael, London.

357 GIRDLE ORNAMENT (*p'ei*); jade. Di. 5 cm. Period of the Warring States. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

358 ORNAMENT of tiger form; jade. L. 13·9 cm. Period of the Spring and Autumn Annals. Lent by Mrs. Christian R. Holmes, New York.

359 GIRDLE ORNAMENT (*p'ei*); jade. Di. 5·4 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

360 RITUAL PENDANT in the form of a dragon; jade. Pair with No. 356. H. 8 cm.; L. 15·1 cm. Period of the Warring States. Lent by Oscar Raphael, London.

361 END OF A SWORD SCABBARD; jade. L. 4·2 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

362 ARROW HEAD; jade. L. 8·3 cm. Han Dynasty. Lent by Chang Nai-chi, Shanghai.

363 GIRDLE ORNAMENT; jade. L. 9·4 cm. Han Dynasty. Lent by Chang Nai-chi, Shanghai.

364 PENDANT; jade. Pair with No. 365. W. 13·5 cm. Period of the Warring States. Lent by Oscar Raphael, London.

365 PENDANT; jade. Pair with No. 364. W. 13·3 cm. Period of the Warring States. Lent by Oscar Raphael, London.

366 PLAQUE; thin brown jade, engraved with silkworm pattern. H. 5·9 cm.; W. 6·2 cm. Period of the Warring States. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

367 PLAQUE; jade. L. 5·3 cm.; W. 3·3 cm. Period of the Spring and Autumn Annals. Lent by H.R.H. The Crown Prince of Sweden.

368 PENDANT with interlaced pattern; green and brown jade. L. 8·2 cm. Period of the Warring States. Lent by H. K. Burnet, Manningham, Yorks.

369 FISH PENDANT; jade. L. 11·5 cm. Early Han Dynasty. Lent by Chang Nai-chi, Shanghai.

370 PENDANT; honey-coloured jade, decorated with entwined dragons in openwork, H. 3 cm. Period of the Warring States. Lent by H. J. Oppenheim, London.

371 DAGGER POMMEL; jade, with interlaced design. H. 6·5 cm. Period of the Warring States. Lent by H.R.H. The Crown Prince of Sweden.

372 PLAQUE; jade. L. 5·4 cm.; W. 3·5 cm. Period of the Spring and Autumn Annals. Lent by H.R.H. The Crown Prince of Sweden.

373 BELT ORNAMENT; jade. L. 4·5 cm. Period of the Warring States. Lent by Chang Nai-chi, Shanghai.

374 PAIR OF FISHES; jade. L. 13·7 cm. Period of the Spring and Autumn Annals. Lent by A. Schoenlicht, The Hague.

375 SWORD-SCABBARD FITTING; jade. L. 10 cm. Period of the Warring States. Lent by Oscar Raphael, London.

376 STAFF; pale green jade, with engraved palmstem design. L. 12 cm. Period of the Spring and

A LIST OF THE NUMBERS OF OBJECTS ILLUSTRATED

Catalogue Number	*Number of Plate*	*Catalogue Number*	*Number of Plate*	*Catalogue Number*	*Number of Plate*
1	103	126	26	207	21
10	7	135	27	216	1
11	2	142	31	217	22
12	6	144	30	218	150
22	14	145	28	220	150
23	2	148	19	224	150
24	4	152	19	229	17
26	11	159	19	232	3
31	4	162	3	238	13
32	5	165	23	240	15
39	11	168	10	242	22
66	30	173	20	244	21
74	23	175	20	245	20
81	32	177	21	247	5
82	32	183	2	248	1
87	24	184	6	249	20
88	24	186	17	253	8
90	39	195	3	255	16
94	27	196	14	257	16
99	31	197	18	258	1
102	29	198	1	259	8
105	29	199	12	260A	7
112	25	203	13	262	10
122	26	205	16	263	18

Autumn Annals. Lent by Mr. and Mrs. Edward Sonnenschein, Glencoe, Ill.

377 LIEN (casket); bronze. Inlaid with gold. Cover missing. H. 10·2 cm. Han Dynasty or later. Lent by The Chinese Government.

378 BUCKLE; bronze. Design reserved on gold ground and inlaid with silver. L. 22·8 cm. Han Dynasty. Lent by Mrs. Christian R. Holmes, New York.

379 PAIR OF CHARIOT FITTINGS; inlaid bronze. W. 10 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

380 PAIR OF CHARIOT FITTINGS; inlaid bronze. L. 12·4 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

381 PAIR OF CHARIOT FITTINGS; inlaid bronze. W. 10 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

382 PAIR OF FINIALS, bronze, in the form of birds' heads, probably for a chair or chariot. Inlaid with silver. L. 19 cm. Period of the Warring States. From the Lucy Maud Buckingham Collection, Chicago.

383 SNAKE HEAD; bronze. Inlaid with gold and silver. L. 6·2 cm. Period of the Warring States. Lent by H.R.H. The Crown Prince of Sweden.

384 HU (wine vessel); bronze. Inlaid with gold and silver. H. 23·5 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

385 RING; bronze, with inlaid gold and silver design. Di. 16·7 cm. Han Dynasty. Lent by The Hon. and Mrs. Robert Woods Bliss, Washington, D.C.

386 STAFF-END; bronze (openwork), inlaid with gold and silver. L. 9 cm. Period of the Warring States. Lent by A. Stoclet, Brussels.

387 STAFF-END, in form of dragon's head; bronze (openwork), inlaid with gold and silver. H. 13·4 cm. Period of the Warring States. Lent by The Cleveland Museum of Art, Cleveland, Ohio.

388 BUCKLE; bronze, with jade centre. Inlaid with gold and silver. W. 8·3 cm. Han Dynasty. From the Lucy Maud Buckingham Collection, Chicago.

389 SWORD; bronze. With gold inlaid inscription along the blade, turquoise and gold on the guard, and a jade disk as pommel. L. 53 cm. Period of the Warring States. Lent by Musée du Louvre, Paris.

390 FRAME FOR A LOOM; bronze. Inlaid with gold. H. 19 cm.; W. 44·2 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

391 TING (caldron) and cover; bronze. Inlaid with silver. H. 15·3 cm. Period of the Warring States. Lent by C. T. Loo, Paris.

392 APPLIQUÉ; bronze. Inlaid with geometric carved design and crouching tiger. L. 18·6 cm. Period of the Warring States. Lent by M. Calmann, Paris.

393 FLAT HU (wine vessel); bronze. H. 32·5 cm. Han Dynasty or later. Lent by Malmö Museum, Malmö, Sweden.

394 PO SHAN LU (censer) and cover; bronze. H. 24·4 cm. Han Dynasty. Lent by Mrs. Christian R. Holmes, New York.

395 LU (brazier); bronze. H. 21·9 cm. Han Dynasty. Lent by Mrs. Christian R. Holmes, New York.

396 DAGGER AND SHEATH; bronze. L. 30 cm. Early Han Dynasty. Lent by The British Museum (Eumorfopoulos Collection).

397 TUBE; bronze. Inlaid with gold and silver. L. 27·9 cm. Han Dynasty. Japanese National Treasure B. Lent by Marquis Goryu Hosokawa, Tokyo.

398 STAND; bronze. Inlaid with gold and silver. H. 6 cm.; L. 12·3 cm.; W. 10·6 cm. Han Dynasty. Lent by The National Museum, Stockholm.

399 MIRROR; bronze. Di. 7 cm. Period of the Warring States. Lent by A. Hellström, Mölndal, Sweden.

400 PO SHAN LU (censer); bronze. Inlaid with gold. H. 19 cm. Han Dynasty. Lent by The German State Museums, Berlin.

401 MIRROR; bronze. Di. 10·4 cm. Period of the Warring States. Lent by The German State Museums, Berlin.

Catalogue Number	*Number of Plate*	*Catalogue Number*	*Number of Plate*	*Catalogue Number*	*Number of Plate*
1058	90	1358	123	1769	148
1069	117	1365	95	1775	140
1072	117	1369	123	1796	141
1074	81	1375	122	1843	135
1080	119	1387	77 and 78	1883	135
1091	85	1389	91	1888	136
1114	86	1411	156	1890	136
1116	88	1414	156	1933	132
1119	88	1488	125	1937	132
1126	70	1505	125	2039	98
1127	81	1531	129	2058	144
1132	92	1543	126	2069	133
1139	76	1546	160	2075	133
1146	87	1549	126	2078	134
1149	119	1555	151	2097	99
1161	119	1557	150	2103	143
1165	96	1563	131	2104	142
1170	118	1579	131	2115	143
1184	84	1588	130	2138	143
1197	124	1590	131	2152	142
1199	118	1598	128	2173	99
1218	119	1600	92	2176	98
1221	83	1607	151	2272	97
1222	94	1609	128	2334	158
1232	149	1612	127	2347	52
1233	121	1632	150	2366	105
1243	94	1663	137	2379	89
1245	120	1665	139	2396	61
1254	121	1667	141	2397	61
1261	93	1683	138	2400	60
1269	149	1690	137	2403	56
1275	120	1718	138	2423	108
1303	86	1727	140	2425	107
1322	96	1766	157	2437	108
1340	124	1767	157	2438	109

Catalogue Number	*Number of Plate*	*Catalogue Number*	*Number of Plate*	*Catalogue Number*	*Number of Plate*
265	12	481	55	768	40
270	42	490	34	789	62
275	42	491	34	798	59
276	42	499	34	799	59
283	42	506	34	800	57
299	47	509	35	805	59
301	41	510	35	809	67
303	42	511	35	810	65 and 66
305A	41	513	36	815	107
307	46	527	37	834	113
319	9	529	106	856	114
320	9	530	48	858	79
329	43	533	37	873	115
331	45	548	104	875	116
341	44	550	37	894	71
350	47	553	48	895	71
351	42	559	45	900	69
358	43	570	105	918	76
359	47	578	39	932	122
369	43	596	47	949	80
372	47	610	46	957	114
378	37	630	60	959	115
388	38	637	67	970	80
389	38	641	58	974	72
397	38	647	73	977	112
442	36	659	40	983	112
445	33	661	40	1000	74 and 75
449	33	662	40	1001	90
452	33	679	65	1004	73
454	103	707	47	1006	113
465	33	743	155	1017	49
468	155	753	62	1020	153
476	56	755	68	1036	82
478	55	757	57	1040	87
480	49	758	64	1045	116

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Catalogue Number	Number of Plate	Catalogue Number	Number of Plate	Catalogue Number	Number of Plate
2440	110	2795	50	2931	154
2441	111	2799	54	2935	153
2460	110	2805	51	2937	154
2466	106	2806	53	2939	153
2470	89	2812	95	2944	159
2498	63	2854	50	2962	100
2512	160	2887	52	2972	100
2525	145-7	2894	54	2981	97
2538	82	2906	53	3022	159
2574	144	2910	53	3038	101
2683	134	2924	154	3057	102
2784	51	2925	154	3073	102
2790	50	2930	159	3076	101

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GENERAL INDEX

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PLATES







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PLATE 1

*

198

TING (CALDRON)

Bronze. Height 18·2 cm.
Shang-Yin dynasty
Lent by A. Hellström, Mölndal, Sweden
See Östasiatiska Samlingarna, *Bulletin*, No. 6, pl. x, etc.
One of the earliest examples known

248

RECTANGULAR TING (CALDRON)

Bronze. Height 22·2 cm.
Shang-Yin or early Chou dynasty
(Inscription also reproduced)
Lent by the Earl of Elgin and Kincardine, K.T., C.M.G., Dunfermline
From the Summer Palace

258

LI (CALDRON)

Bronze. Height 30 cm.
Shang-Yin dynasty
Lent by M. Calmann, Paris

216

TING (CALDRON)

Bronze with black inlay. Height 32 cm.
Shang-Yin dynasty
(Inscription also reproduced)
Lent by E.M.B. Ingram, C.M.G., Rome

PLATE 2

*

183

TING (CALDRON)

Bronze. Height 18·8 cm.
Shang-Yin or early Chou dynasty
(Inscription also reproduced)
Lent by W. van der Mandele, Bloemendaal, Holland
See Kümmel, "*Jörg Trübner zum Bedächtnis*," pl. vi

11

TING (CALDRON)

Bronze. Height 24·5 cm.
Shang-Yin dynasty
(Inscription also reproduced)
Lent by the Chinese Government

23

TING (CALDRON)

Bronze. Height 24·7 cm.
Shang-Yin or early Chou dynasty
(Inscription also reproduced)
Lent by the Chinese Government



183



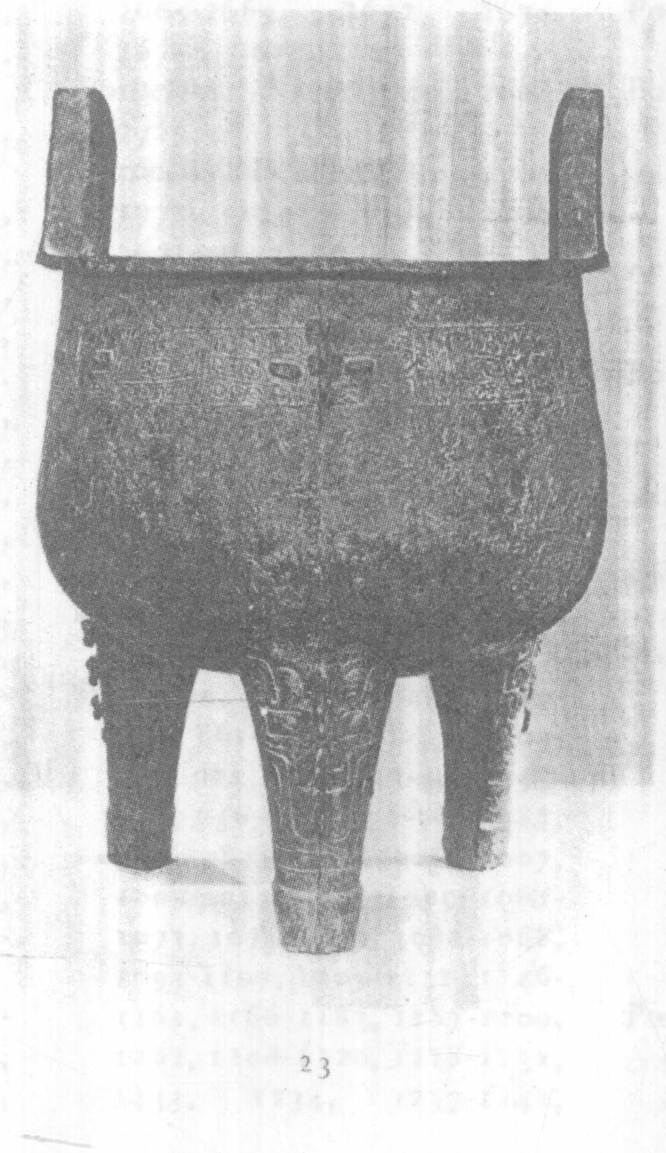
11



183



11





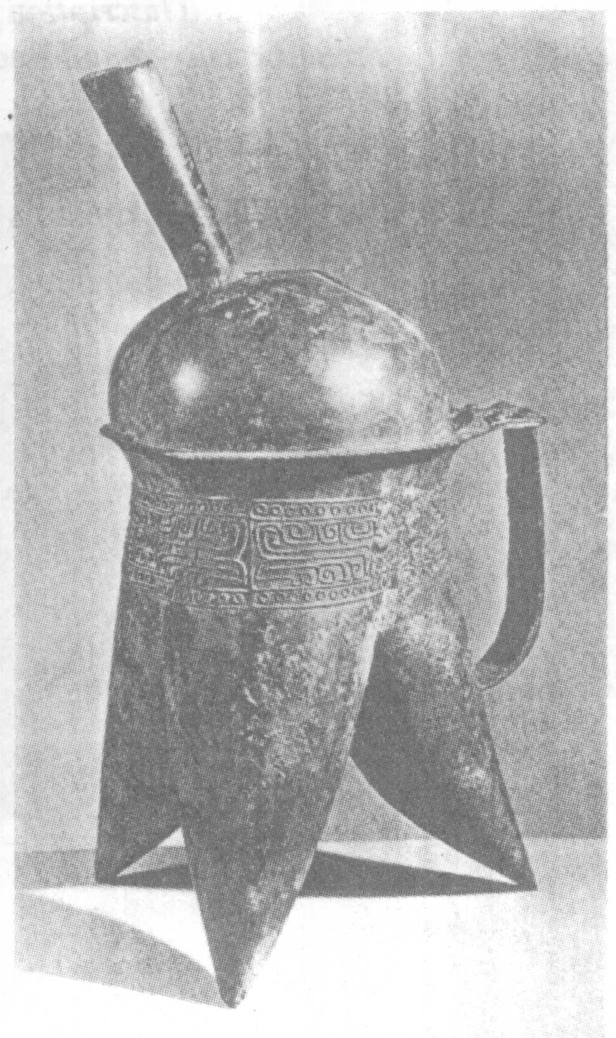
23 23



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PLATE 3

*

232

CHIA (WINE-VESSEL) AND COVER

Bronze. Height 35 cm.

Shang-Yin or early Chou dynasty

Lent by the William Rockhill Nelson Gallery of Art, Kansas City

195

HU (WINE-VESSEL) AND COVER

Bronze. Height 37 cm.

Period of the Spring and Autumn Annals or later

Lent by D. David-Weill, Paris

An unusual bronze, probably of provincial origin, perhaps Southern

162

HO (WINE-VESSEL)

Bronze. Height 31·7 cm.

Chou dynasty

Lent by the German State Museums, Berlin

PLATE 4

*

24

HO (WINE-VESSEL)

Bronze. Height 28·5 cm.

Shang-Yin dynasty

(Inscription also reproduced)

Lent by the Chinese Government

31

HO (WINE-VESSEL)

Bronze. Height 27·3 cm.

Shang-Yin dynasty

(Inscription also reproduced)

Lent by the Chinese Government

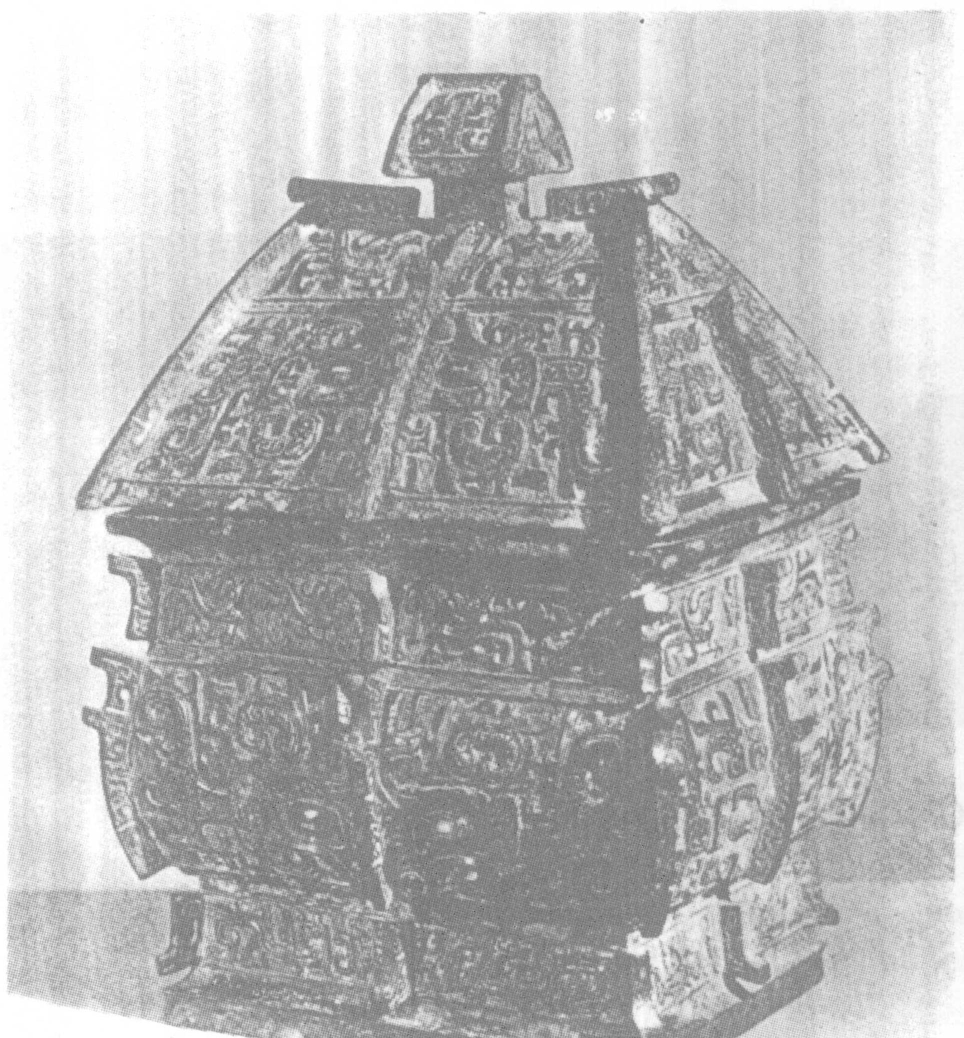


24



31

247





32



PLATE 5

*

247

I (CASKET-SHAPED VESSEL)

Bronze. Height 36 cm.
Early Chou dynasty
(Inscription also reproduced)
From the Lucy Maud Buckingham Collection, Chicago

32

SQUARE LEI (WINE-VESSEL) AND COVER

Bronze. Height 26·4 cm.
Shang-Yin or early Chou dynasty
Lent by the Chinese Government

PLATE 6

*

184

KU (WINE VESSEL)

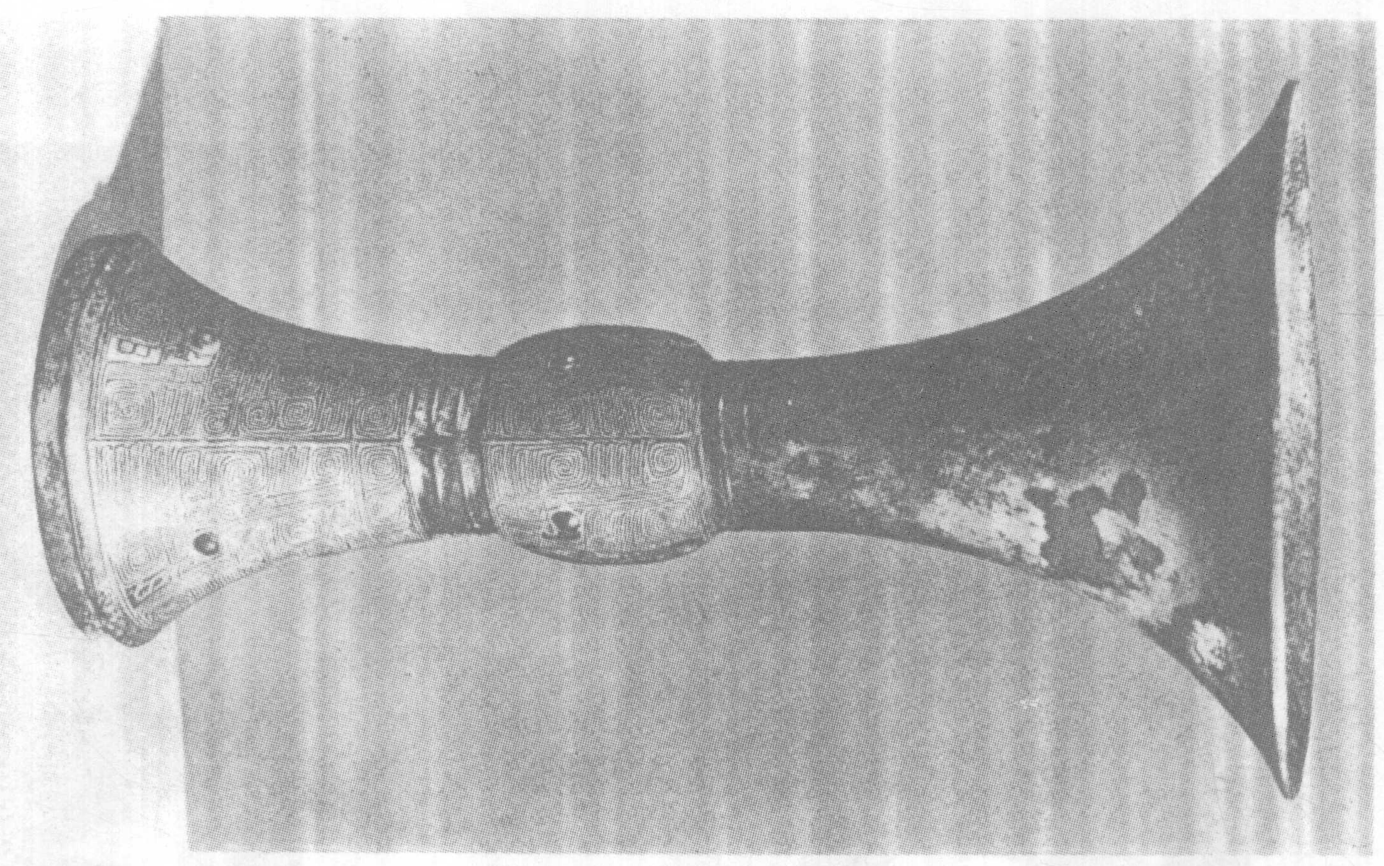
Bronze. Height 26 cm.
Early Chou dynasty
Lent by H. K. Burnet, Bradford

12

TSUN (WINE VESSEL)

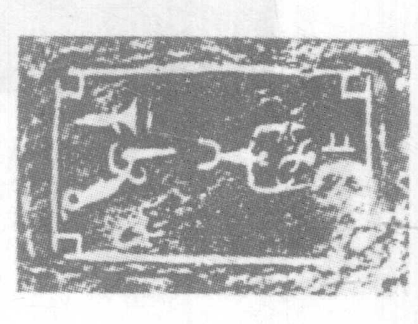
Bronze. Height 25·9 cm.
Shang-Yin dynasty
(Inscriptions also reproduced)
Lent by the Chinese Government

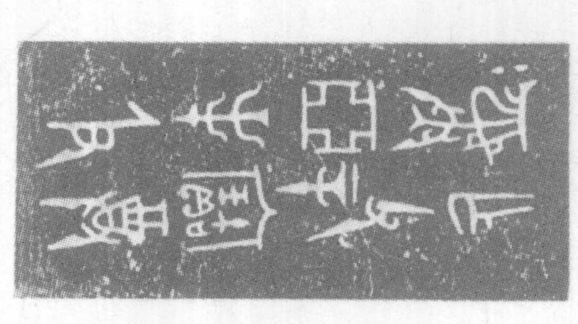
184

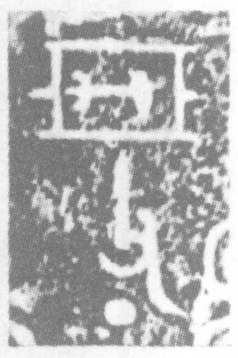


12







10




260A

PLATE 7

*

10

KUEI (FOOD-VESSEL)

Bronze. Height 22·9 cm.
Shang-Yin dynasty
(Inscription also reproduced)
Lent by the Chinese Government

260A

KUEI (FOOD-VESSEL)

Bronze. Height 24 cm.
Early Chou dynasty
(Inscription also reproduced)
Lent by Maj.-Gen. Sir Neill Malcolm, K.C.B., D.S.O., London

PLATE 8

*

253

KUANG (WINE-VESSEL) AND COVER AND LADLE

Bronze. Interior partitioned. Length 21 cm.
Early Chou dynasty
(Inscription also reproduced)
Lent by Oscar Raphael, London

259

KUANG (WINE VESSEL)

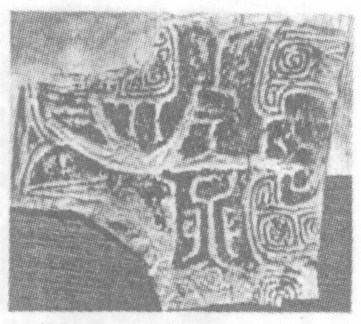
Bronze. Height 23·5 cm.
Shang-Yin dynasty
Lent by Mr. & Mrs. Walter Sedgwick, London

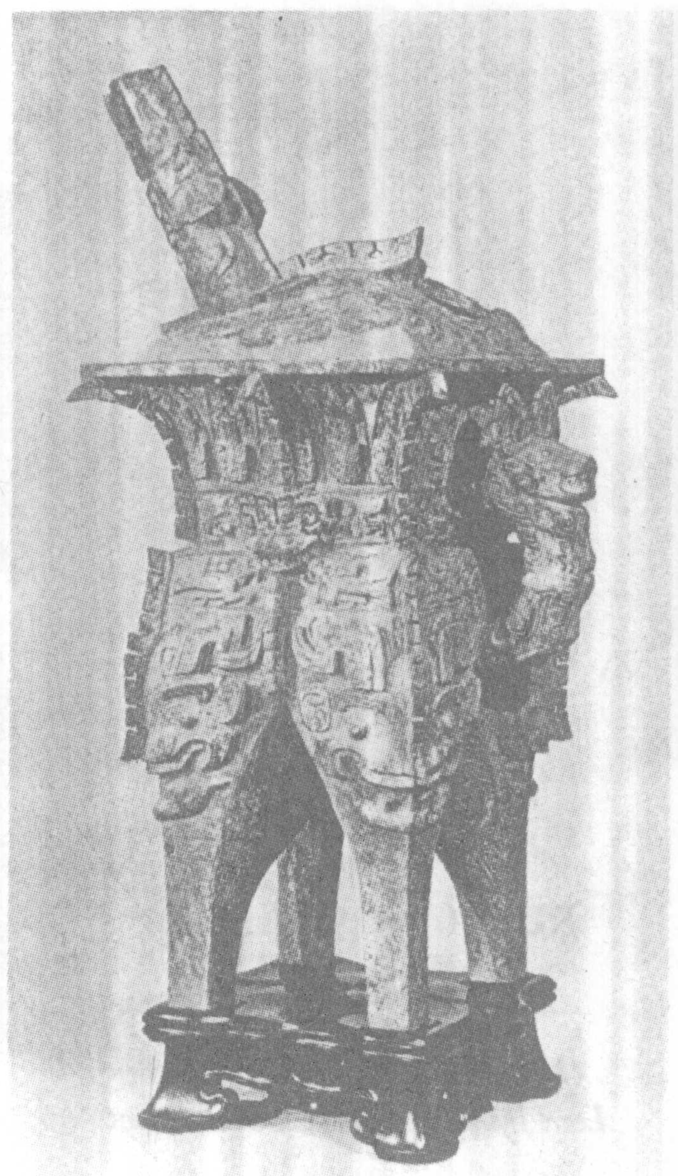
253



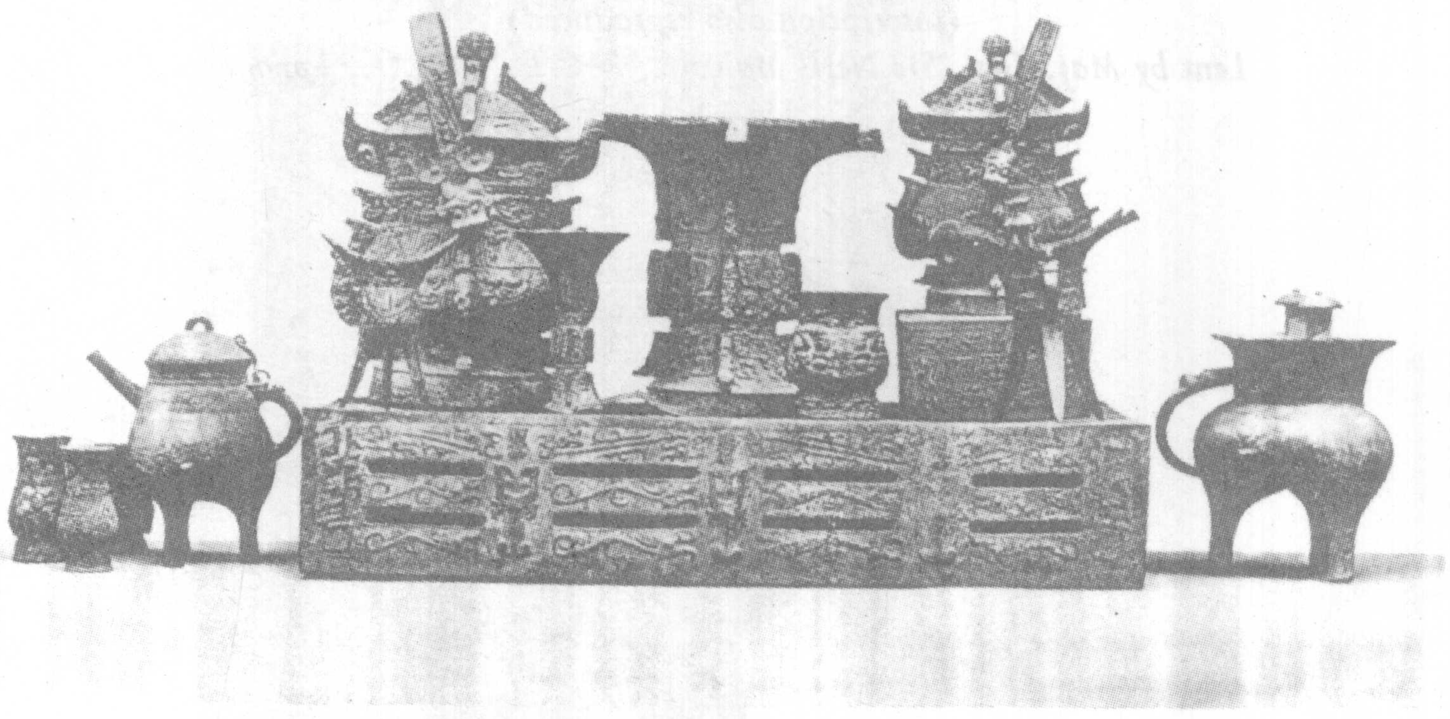

259







320



319

PLATE 9

*

320

HO (WINE-VESSEL)

Bronze. Height 73 cm.
Shang-Yin dynasty
(Inscription also reproduced)
Lent by Kaichiro Nedzu, Tokyo
One of a set of three, probably from An-yang

319

SET OF SACRIFICIAL WINE VESSELS AND ALTAR TABLE

Bronze
Found near Pao-chi, Shensi, in 1901
Shang-Yin dynasty
Lent by the Metropolitan Museum of Art, New York
From the Tuan Fang Collection
See Metropolitan Museum, *Bulletin*, vol. xix, p. 121

PLATE 10

*

168

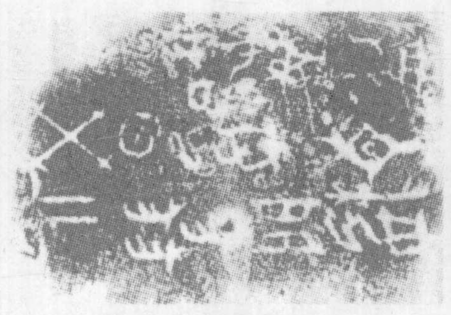
CHIO (WINE-VESSEL) AND COVER

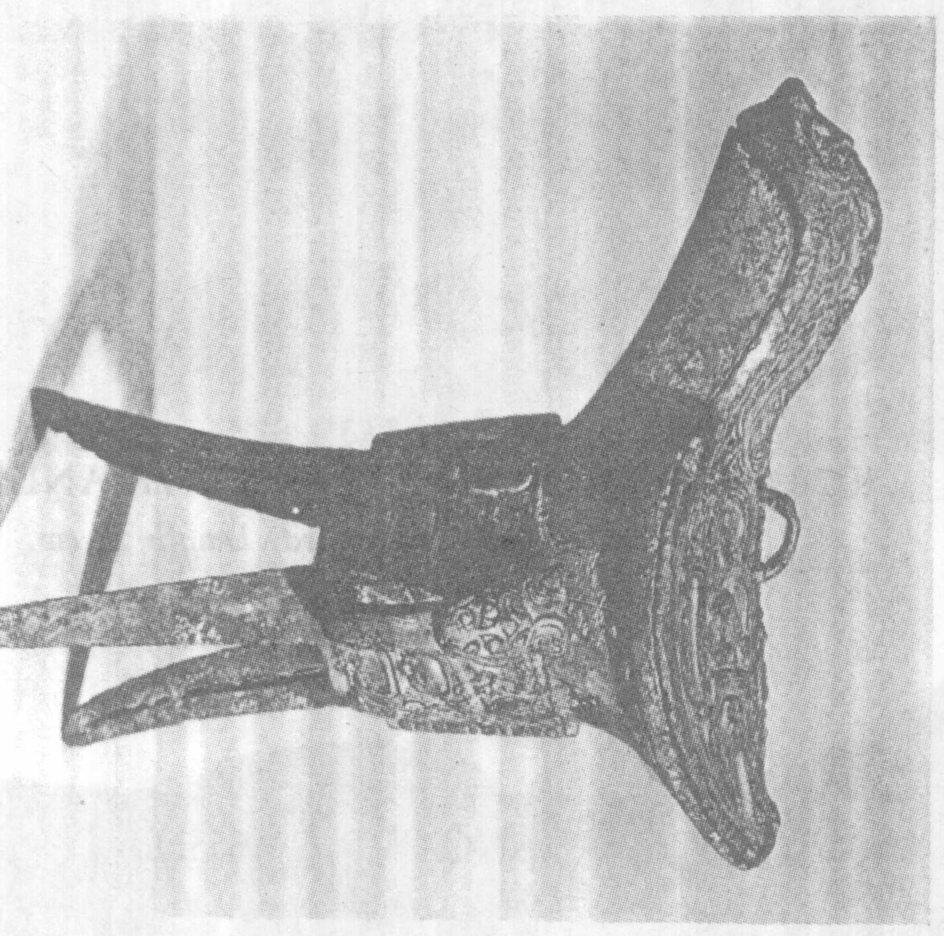
Bronze. Height 19·3 cm.
Early Chou dynasty
(Inscription also reproduced)
Lent by Matasaku Shiohara, Tokyo
Japanese National Treasure B.

262

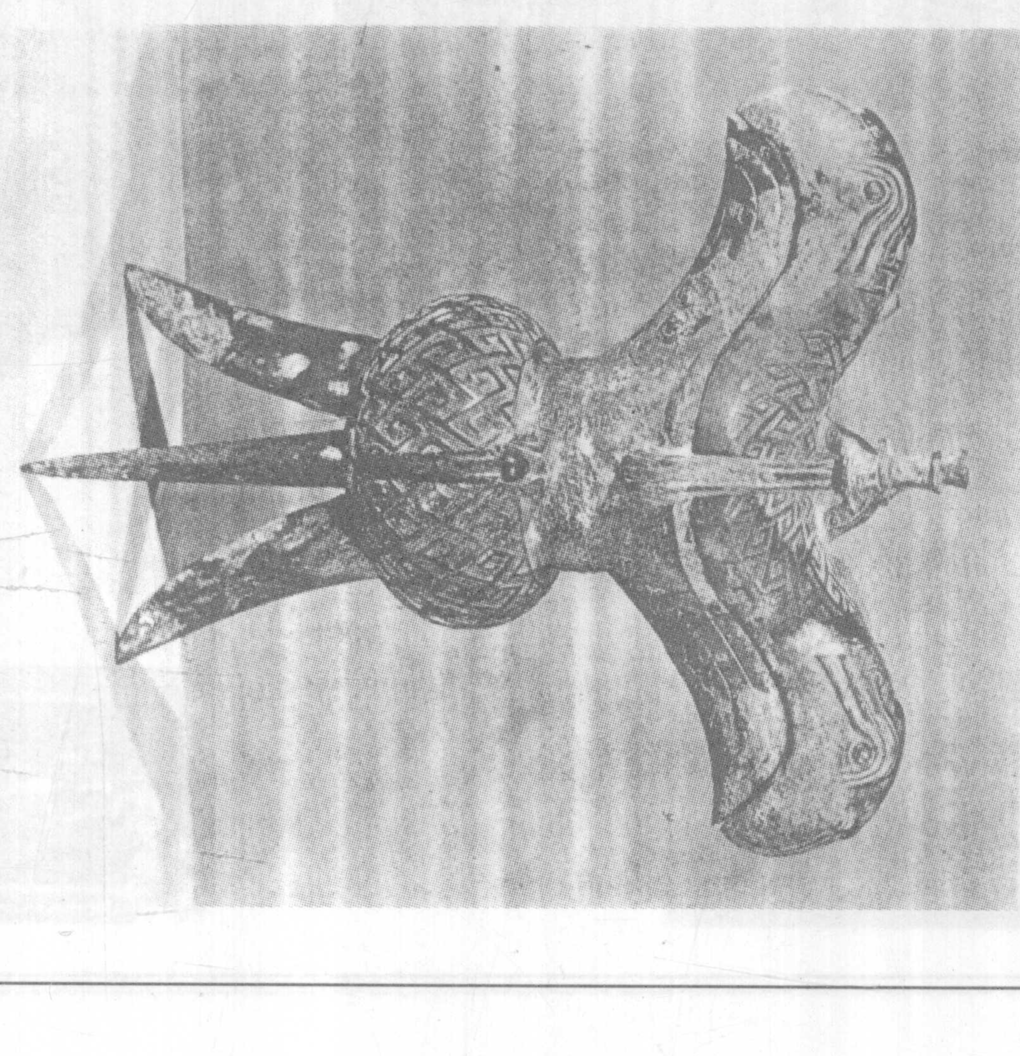
HU (WINE-VESSEL) AND COVER

Bronze. Height 24·4 cm.
Shang-Yin or early Chou dynasty
Lent by Mrs. William H. Moore, New York





168



262



26



39

PLATE 11

*

26

P'OU (? WINE-VESSEL)

Bronze. Height 20 cm.
Shang-Yin or early Chou dynasty
Lent by the Chinese Government

39

LEI (WINE-VESSEL)

Bronze. Height 37 cm.
Shang-Yin or early Chou dynasty
Lent by the Chinese Government

PLATE 12

*

199

YU (WINE-VESSEL)

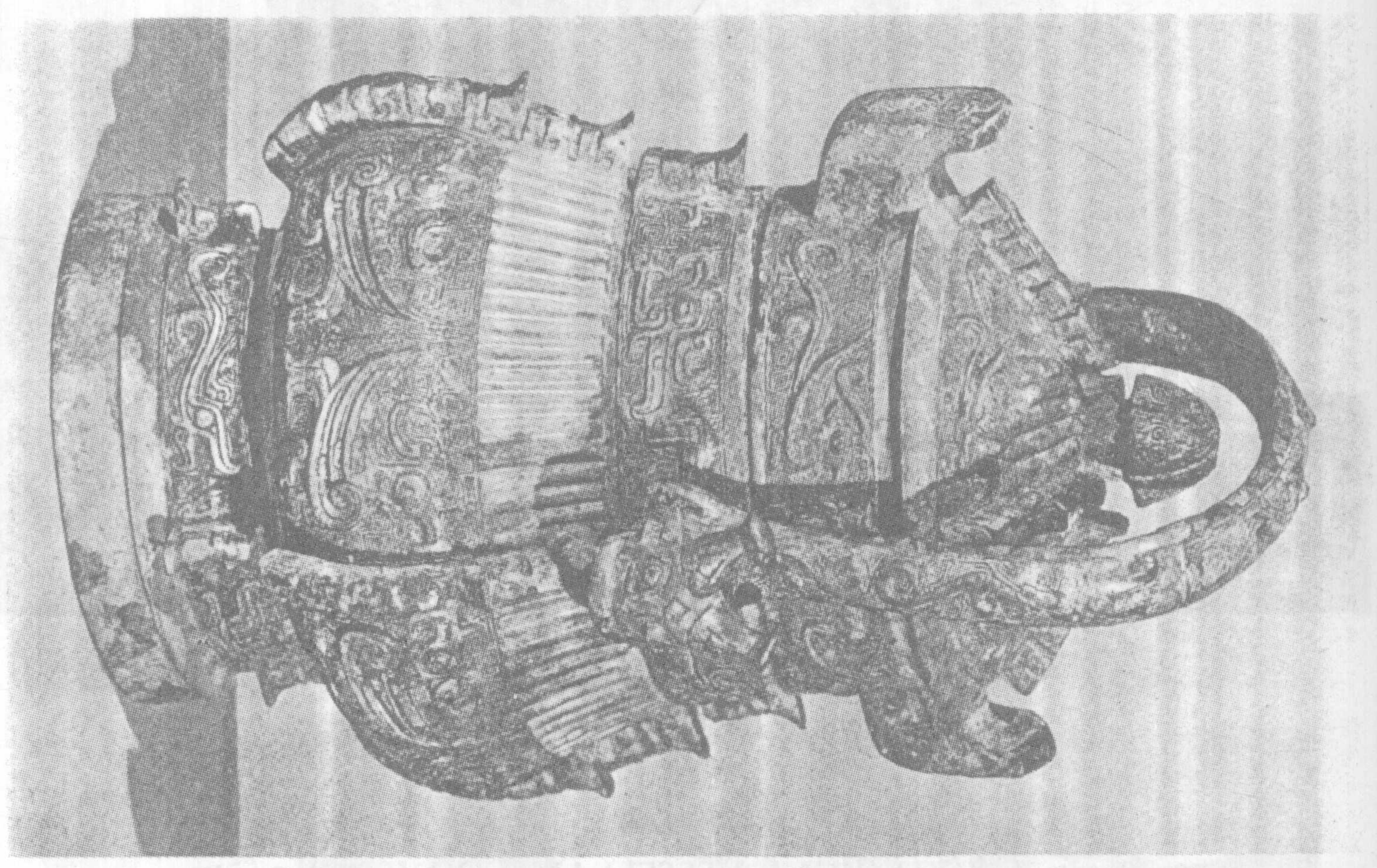
Bronze. Height 24·5 cm.
Shang-Yin dynasty
(Inscription also reproduced)
Lent by G. Eumorfopoulos, London

265

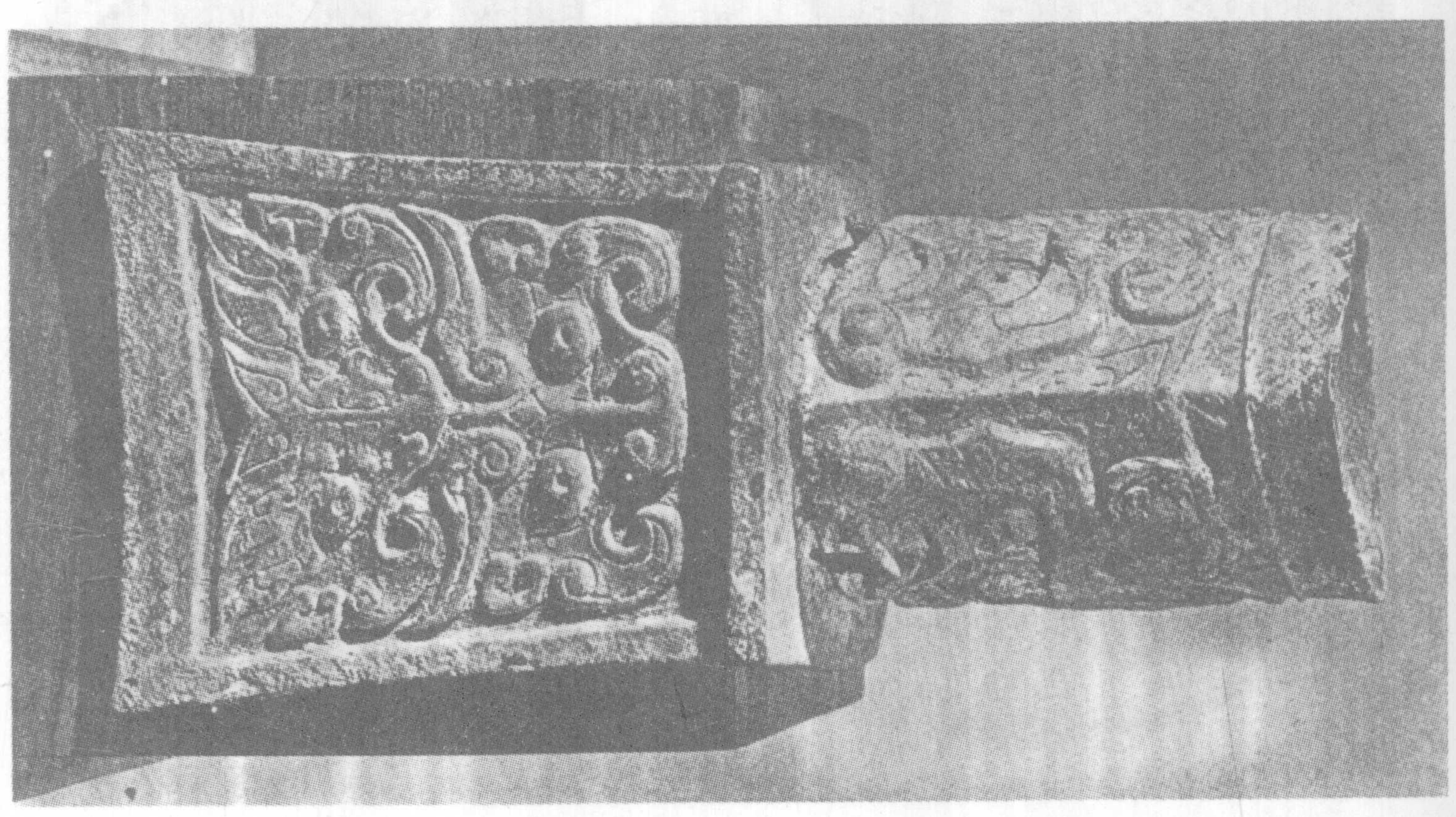
LITTER-FITTING

Bronze. Height 20·5 cm.
Early Chou dynasty
Lent by Maj.-Gen. Sir Neill Malcolm, K.C.B., D.S.O., London

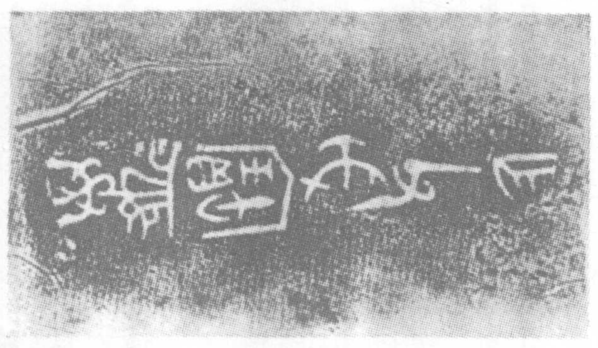


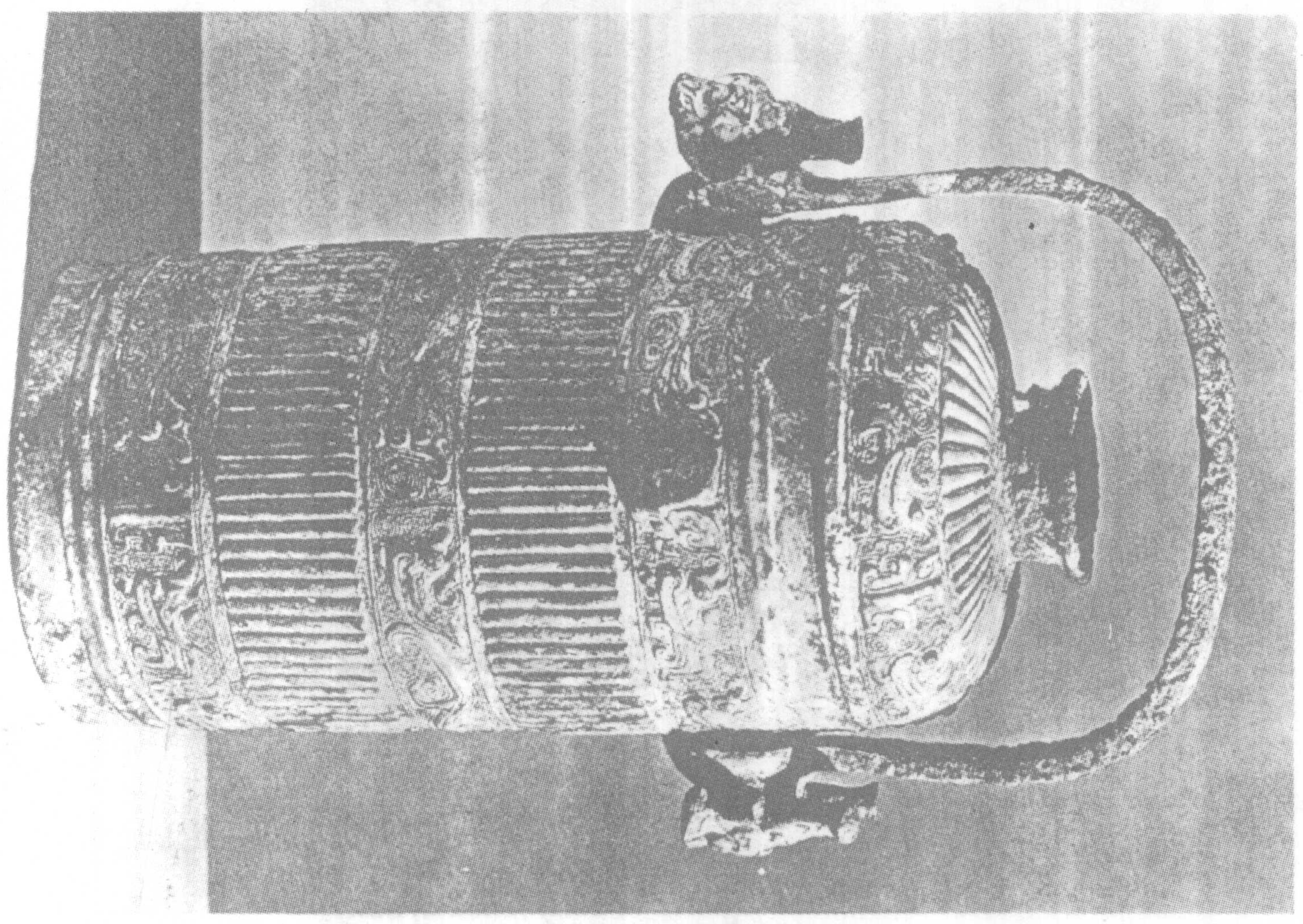


199

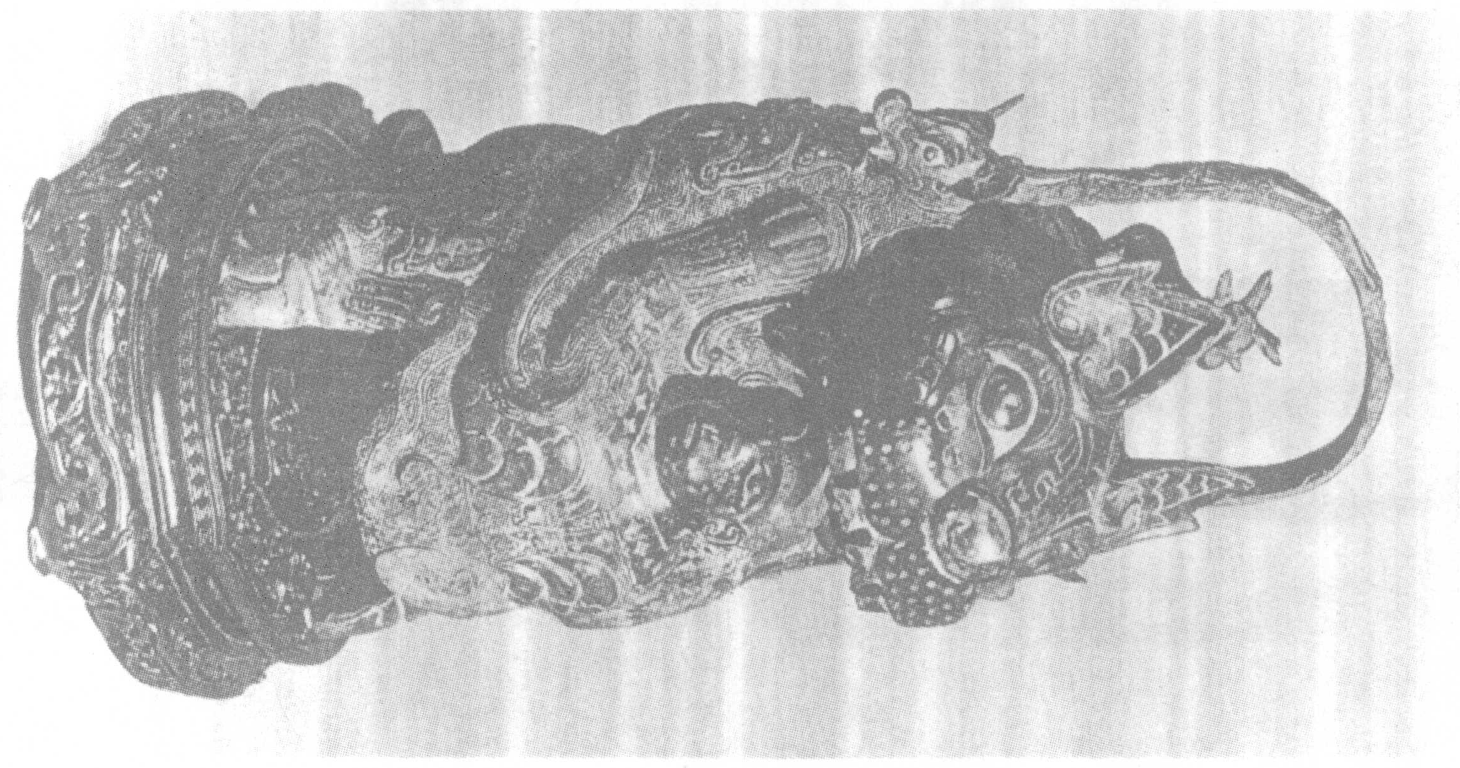


265





203



238

PLATE 13

★

203

YU (WINE-VESSEL)

Bronze. Height 24·7 cm.
Shang-Yin or early Chou dynasty
(Inscription also reproduced)
Lent by H.G. Oeder, Altmark, Germany

238

YU (WINE-VESSEL) AND COVER

Bronze. Height 35·5 cm.
Period uncertain
Lent by Baron Kichizayemon Sumitomo
Japanese National Treasure B.

The similar vessel in the Musée Cernuschi, Paris, was also exhibited (Cat. No. 243), but it was not found possible to agree as to whether one vessel was a copy of the other or not.

PLATE 14

★

22

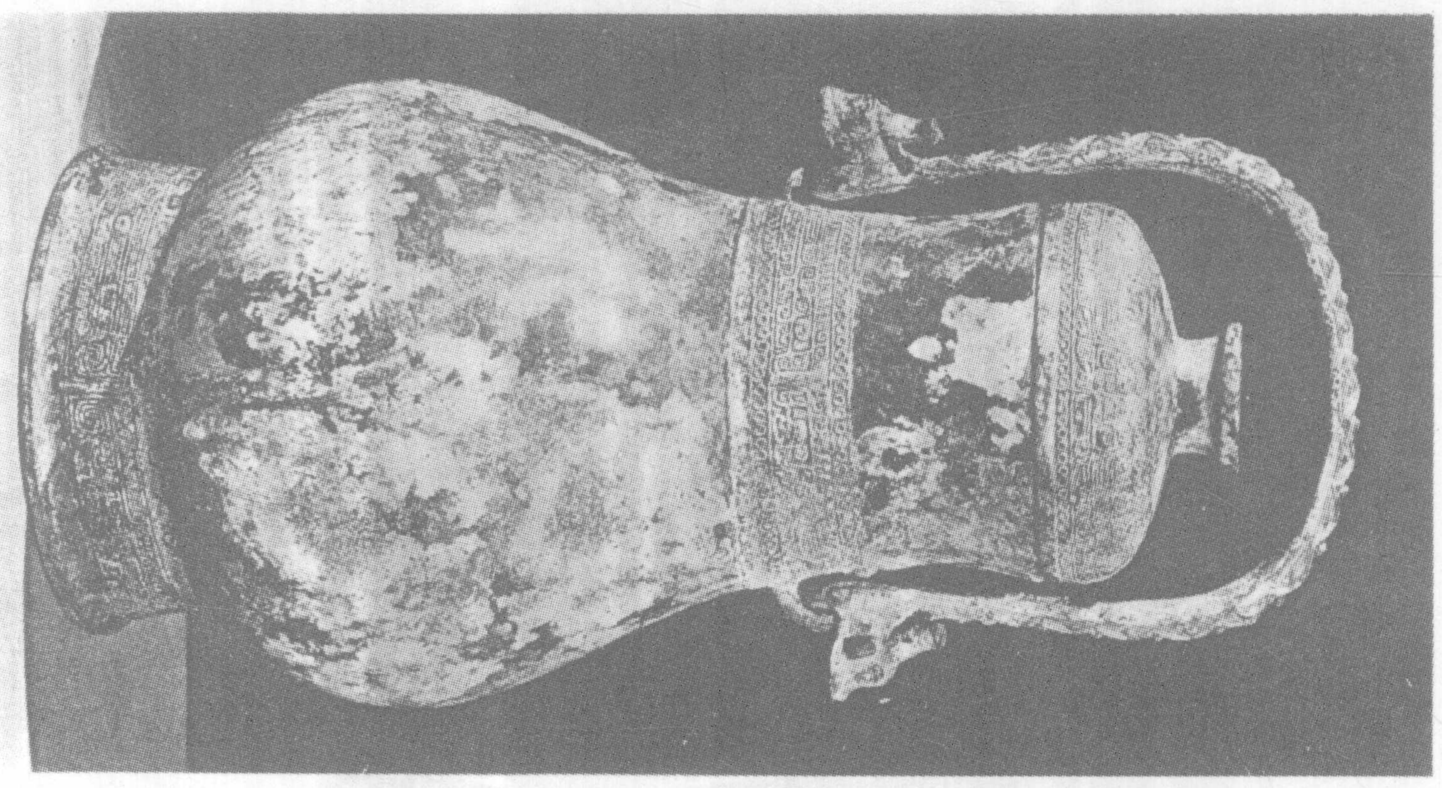
YU (WINE-VESSEL) WITH SPOUT

Bronze
Shang-Yin dynasty
(Inscription also reproduced)
Lent by the Chinese Government

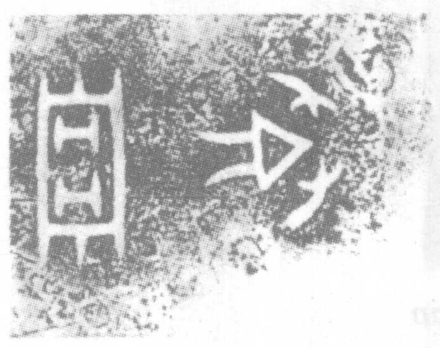
196

YU (WINE-VESSEL) AND COVER

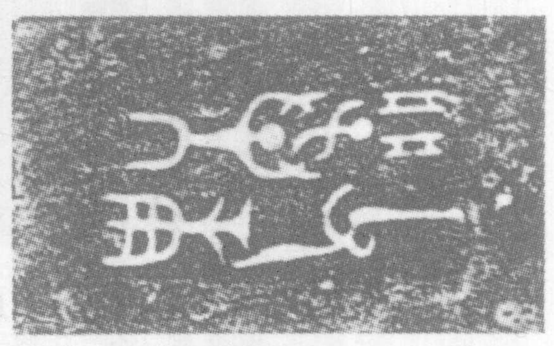
Bronze
Shang-Yin dynasty
(Inscription also reproduced)
Lent by M.W. van der Mandele, Bloemendaal, Holland
See Maandblad vor Beeldende Kunst, vol. viii, p. 235



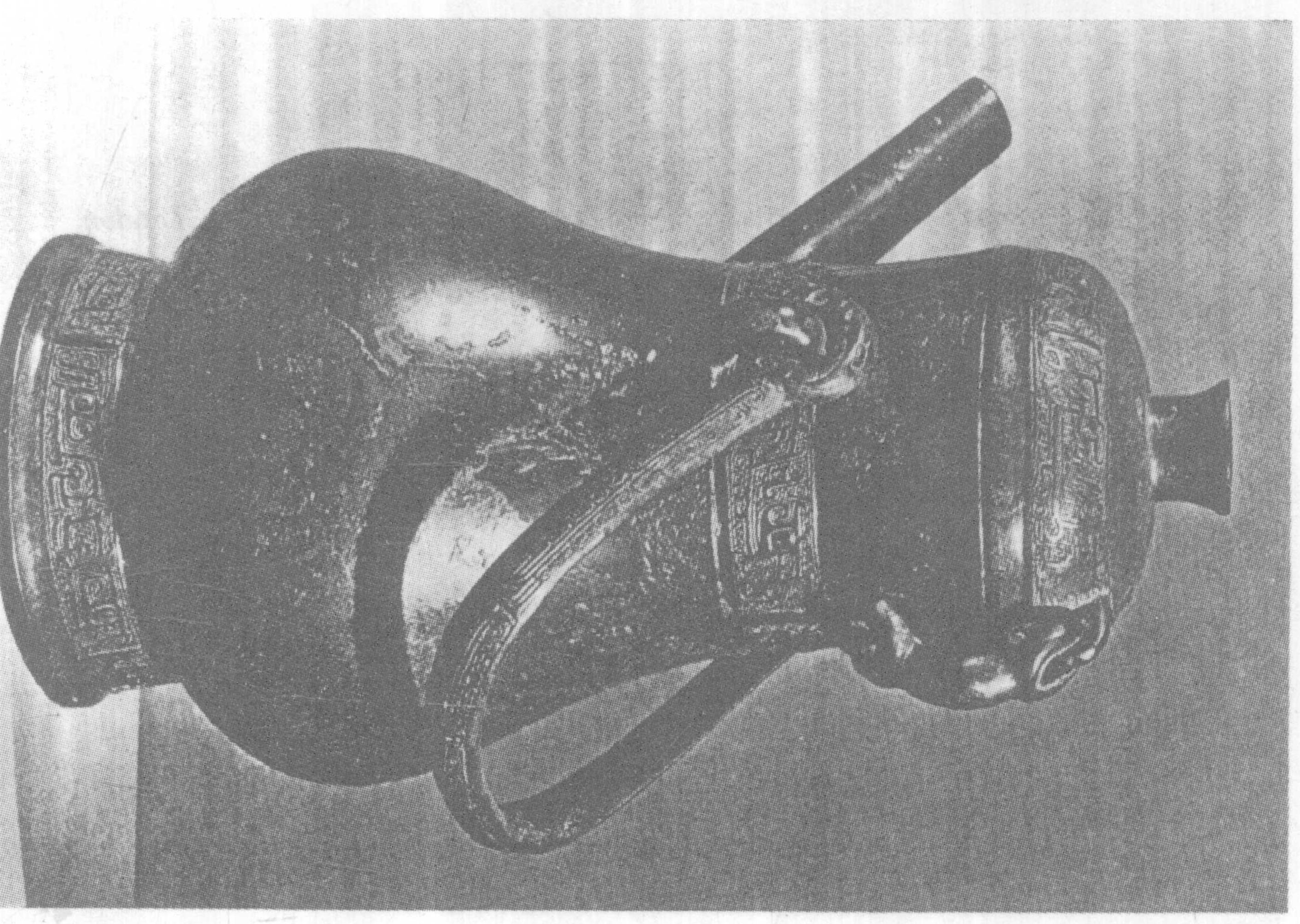
196



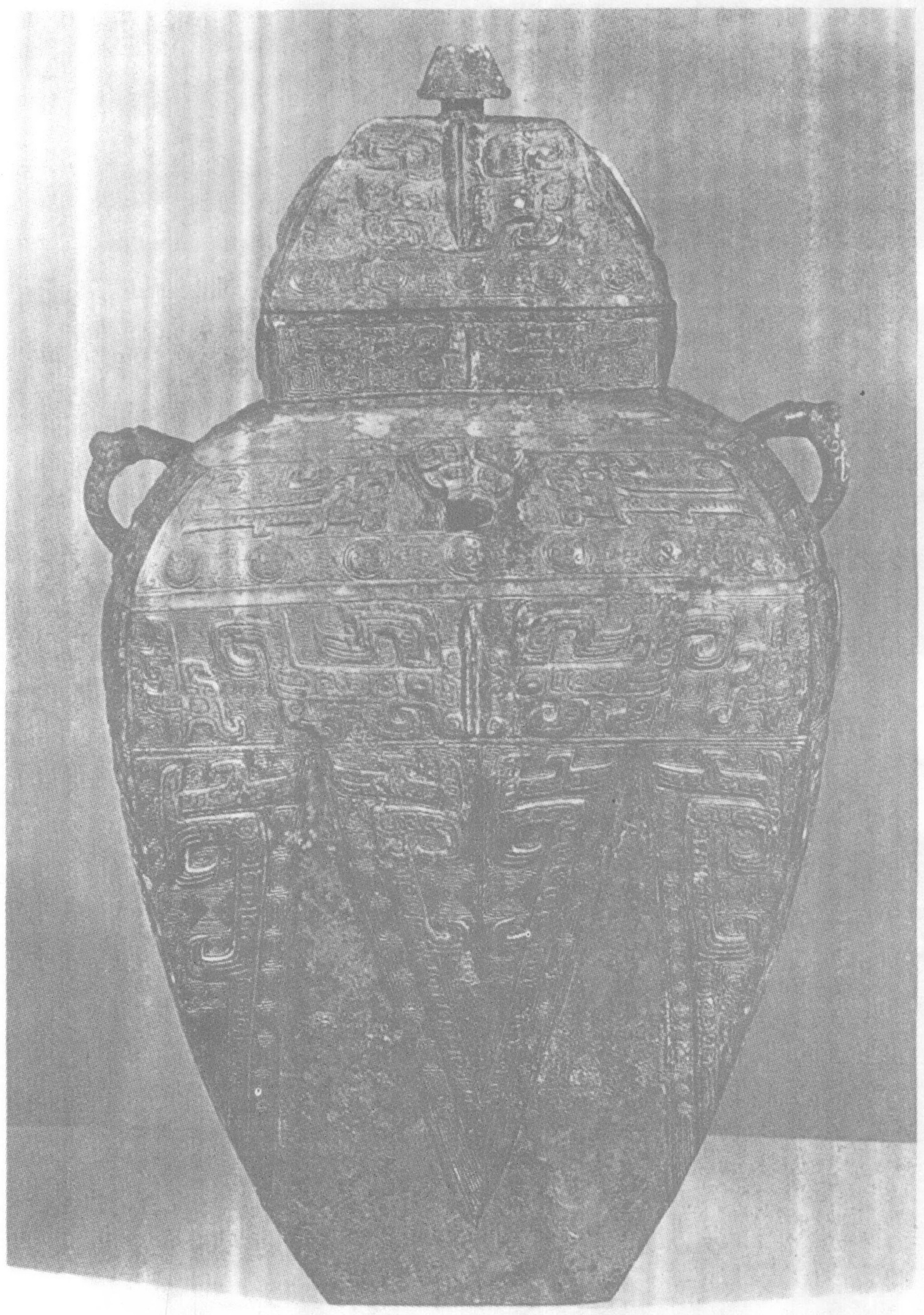
196



22



22





240

PLATE 15

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240
LEI (WINE-VESSEL) AND COVER
Bronze. Height 50·7 cm.
Shang-Yin dynasty
(Inscription also reproduced)
Lent by Kaichiro Nedzu, Tokyo

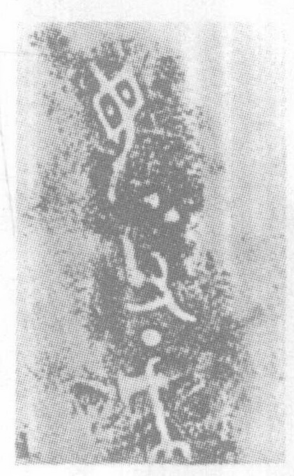
PLATE 16

*

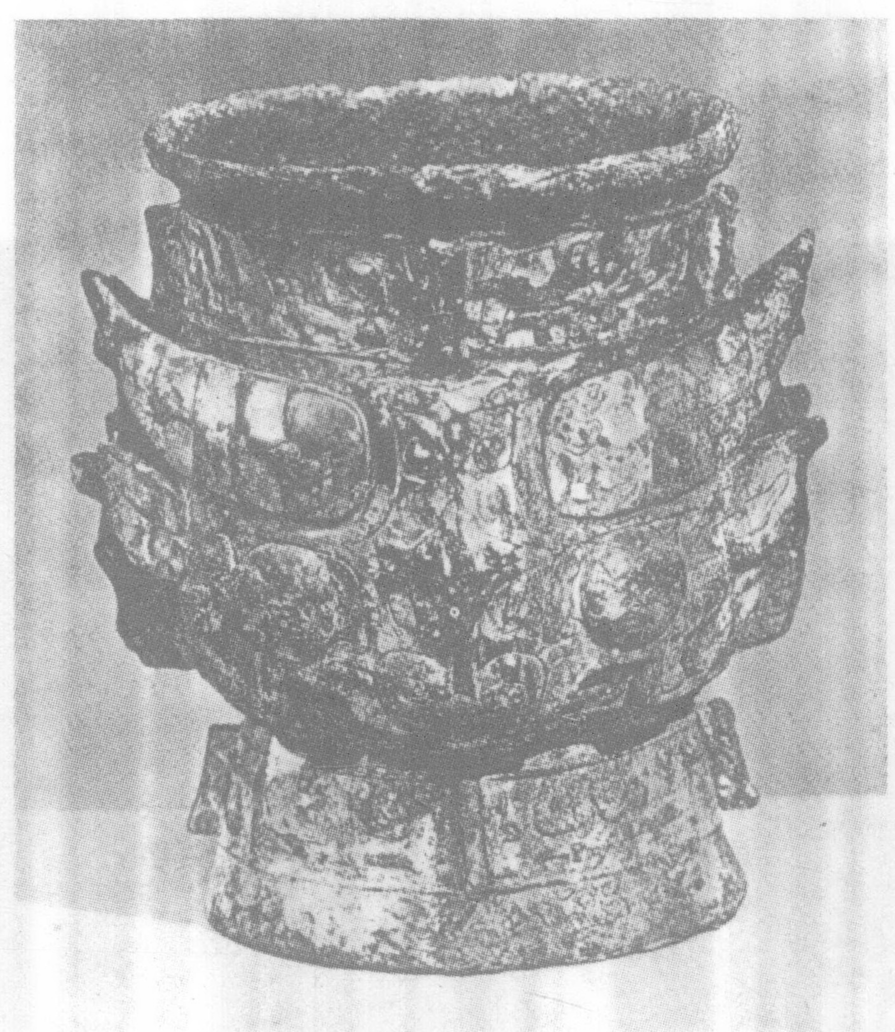
205
CHIH (WINE-VESSEL) WITH HORNS
Bronze. Height 14·5 cm.
Shang-Yin dynasty
(Inscription also reproduced)
Lent by Mr. and Mrs. Walter Sedgwick, London

255
CHIH (WINE-VESSEL) AND COVER
Bronze. Height 17 cm.
Shang-Yin or early Chou dynasty
Lent by W. van der Mandele, Bloemendaal, Holland

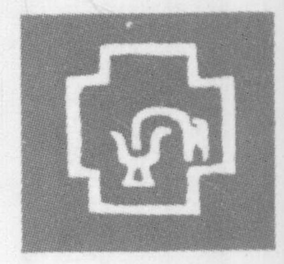
257
KU (WINE-VESSEL) WITH OPENWORK BASE
Height 13·8 cm.
Shang-Yin or early Chou dynasty
(Inscription also reproduced)
Lent by Mrs. Margot Holmes, London



205



205



257



255



257

229



186



PLATE 17

*

229
CHUN (BELL)
Bronze. Height 26·6 cm.
Early Chou dynasty
Lent by Mrs. Christian R. Holmes, New York

186
RECUMBENT BUFFALO
Bronze. Height 11·5 cm. Width 20 cm.
Period of the Spring and Autumn Annals
Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

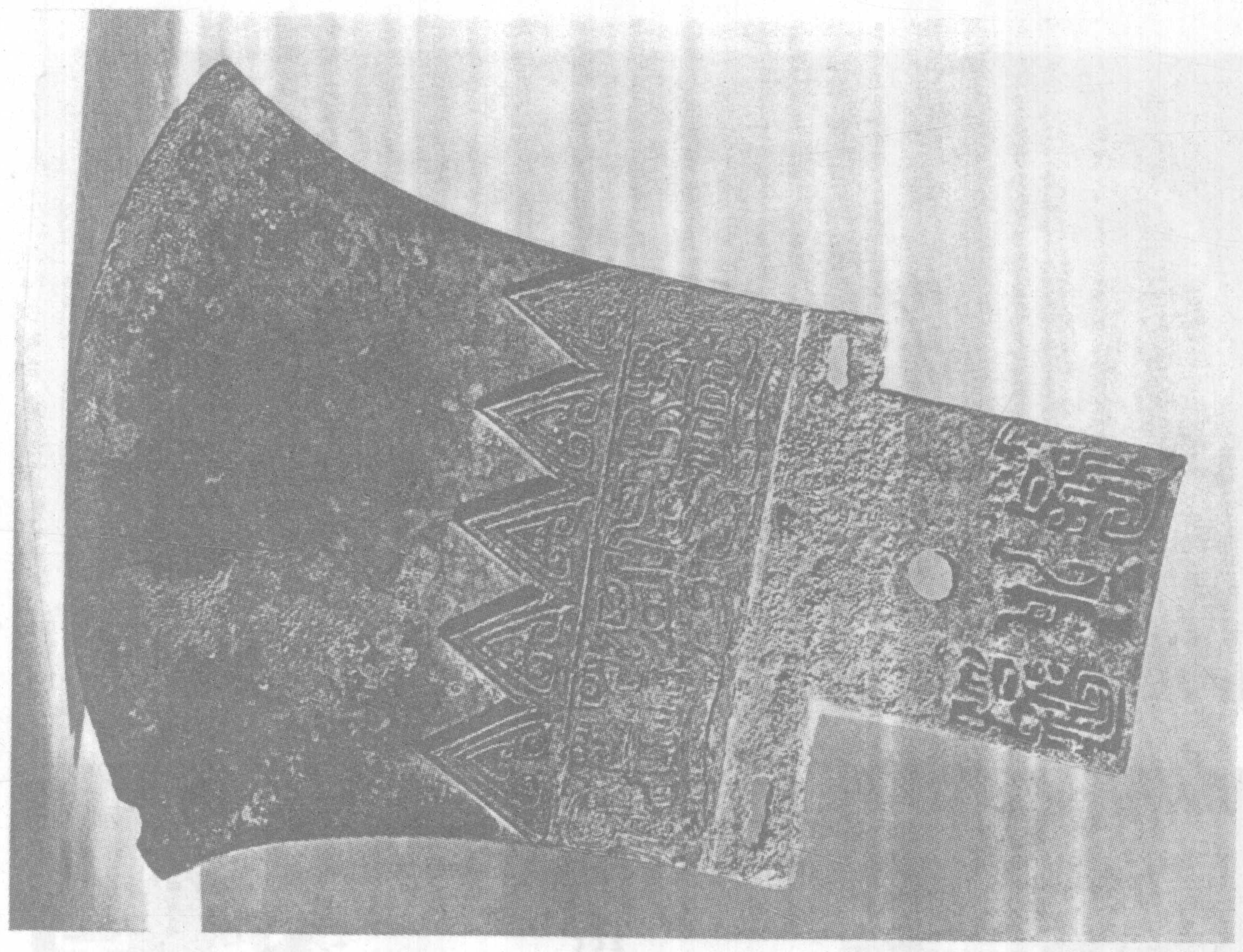
PLATE 18

*

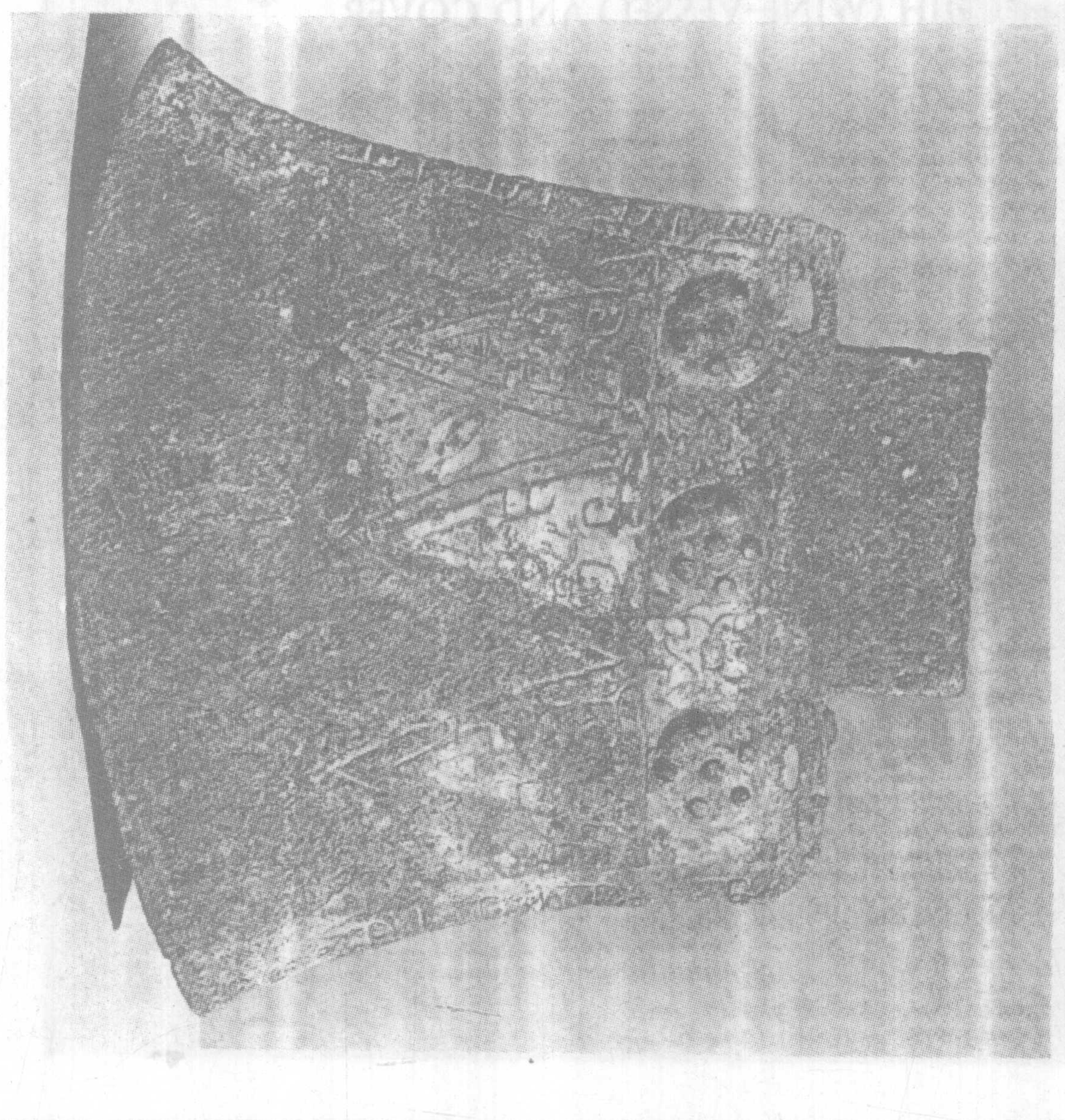
197
AXE-HEAD (CH'I)
Bronze. Height 30·1 cm. Width 32 cm.
Early Chou dynasty
Lent by D. David-Weill, Paris

263
AXE-HEAD (CH'I)
Bronze. Height 23·5 cm.
Shang-Yin dynasty
(Inscriptions also reproduced)
Lent by the William Rockhill Nelson Gallery of Art, Kansas City

263



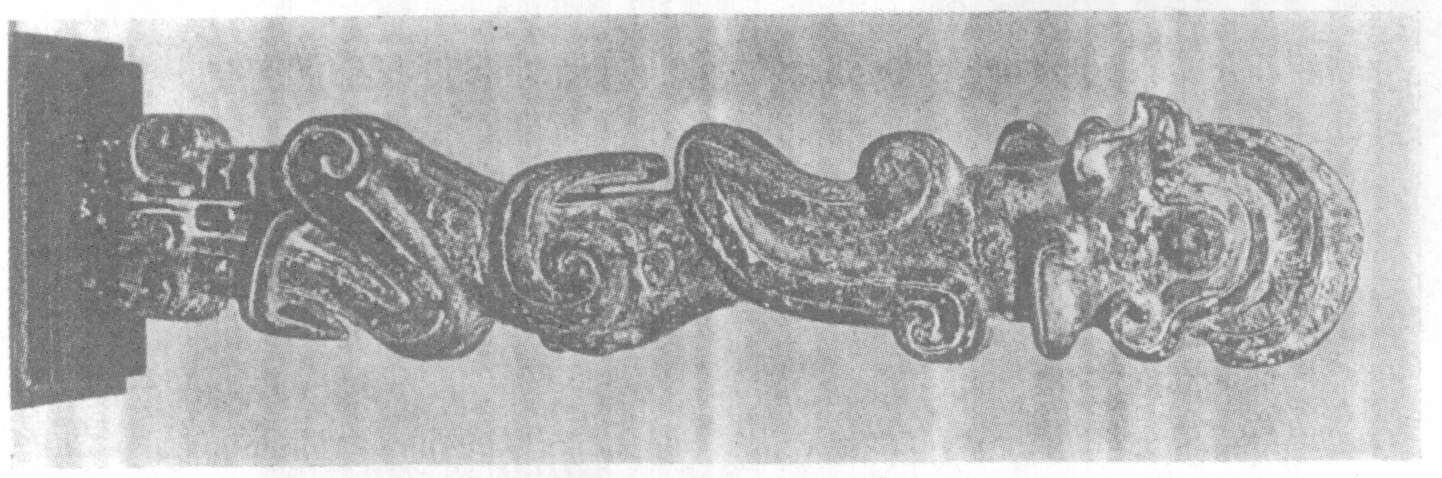
197



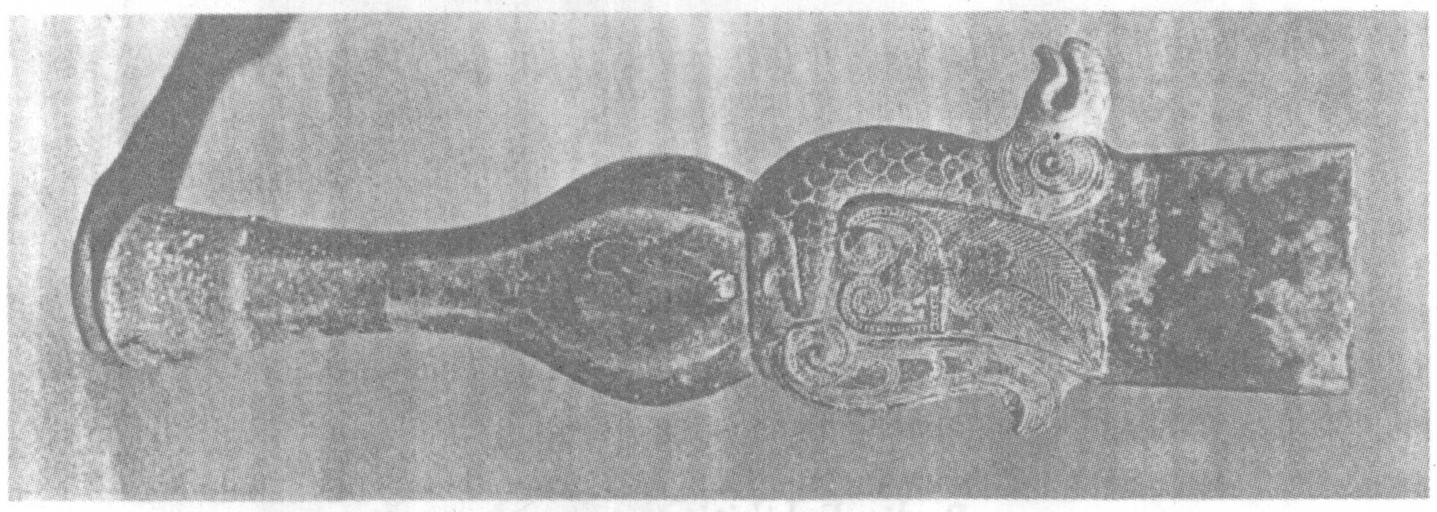
263



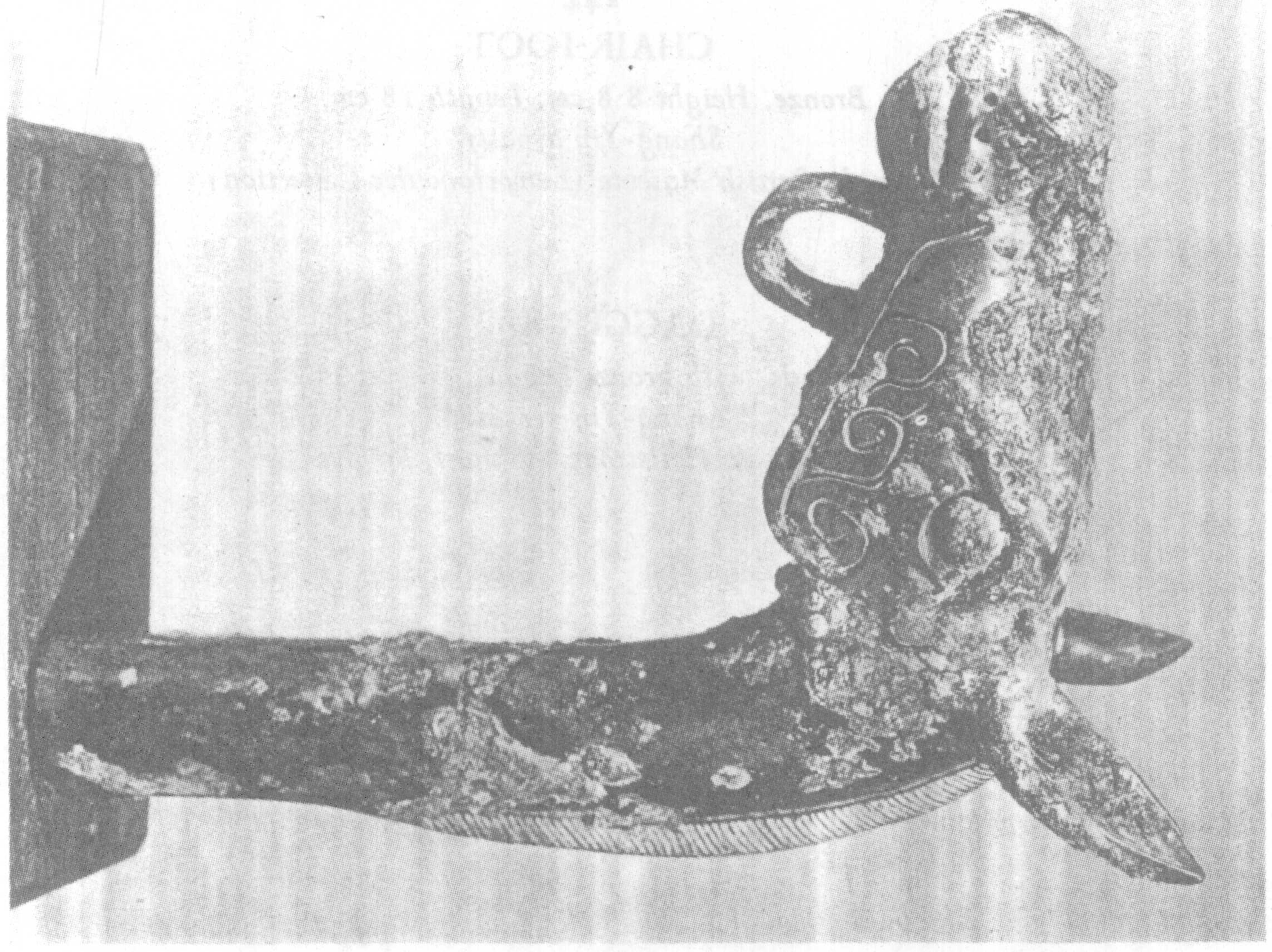




152



159



148

PLATE 19

*

152

CEREMONIAL SHAFT-HEAD

Bronze. Height 17 cm.
Chou dynasty
Lent by H.R.H. The Crown Prince of Sweden
See Östasiatiska Samlingarna, Stockholm, *Bulletin*, No. 6, pl. xxv, etc.

159

BUTT OF A HALBERD (KO)

Bronze. Length 15 cm.
Period of the Warring States
Lent by the Östasiatiska Samlingarna, Stockholm
See Östasiatiska Samlingarna, *Bulletin*, No. 6, pl. xxxvi, etc.

148

POLE FINIAL

Bronze. Height 14·5 cm.
Period of the Spring and Autumn Annals
Lent by G. Eumorfopoulos, London

PLATE 20

*

173

SPEAR-HEAD

Jade, with copper handle, inlaid with turquoise. Height 19·8 cm.
Shang-Yin dynasty
Lent by Oscar Raphael, London

175

SPEAR-HEAD

With nielloed diaper pattern. Bronze. Length 27·4 cm.
Period of the Warring States
Lent by D. David-Weill, Paris

249

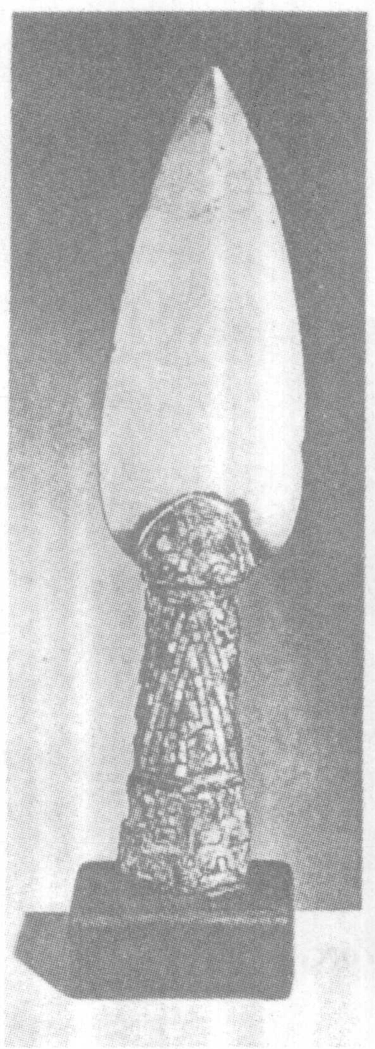
HALBERD (KO)

Bronze. Tortoise design at handle end of blade. Length 24 cm.
Early Chou dynasty
Lent by Mrs. Margot Holmes, London

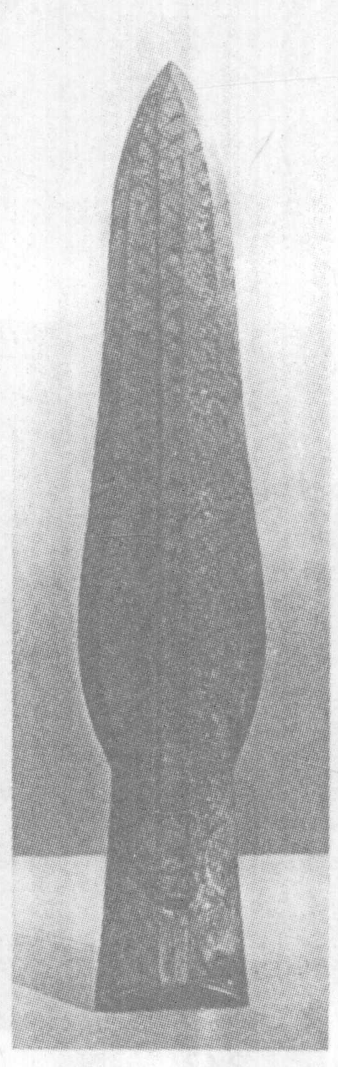
245

HALBERD

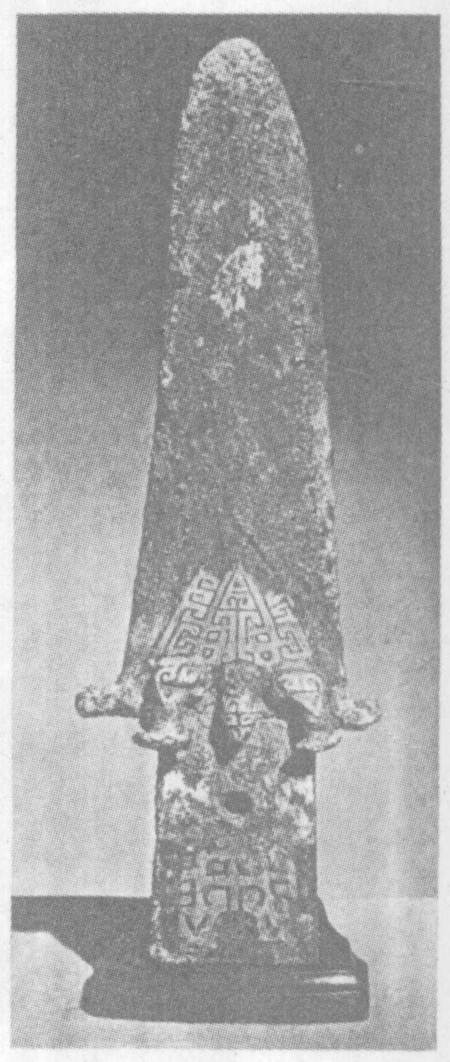
Bronze. Length 48·3 cm.
Shang-Yin dynasty
Lent by Oscar Raphael, London



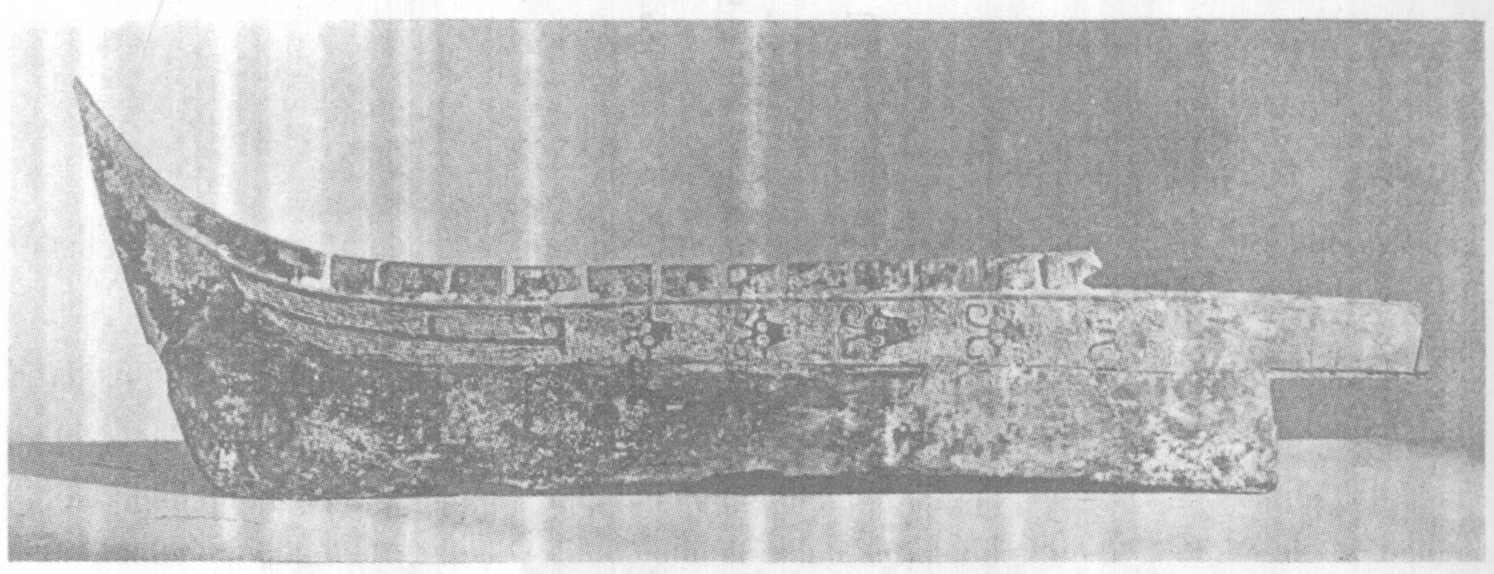
173



175



249



245

177



244



207

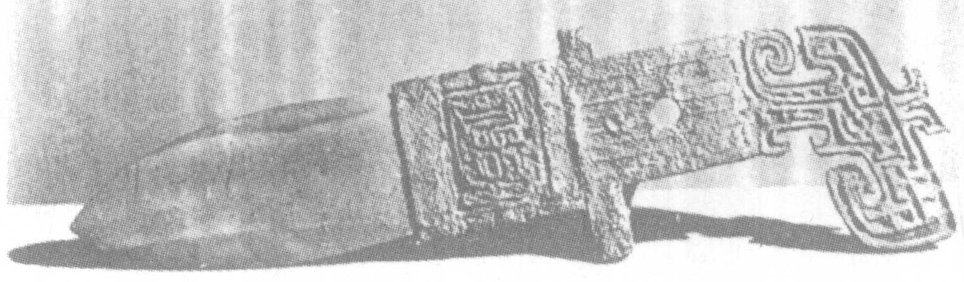


PLATE 21

*

177

CEREMONIAL AXE

Bronze. Length 19·5 cm. Width 12·2 cm.
Shang-Yin dynasty
Lent by C.A. Piek, Bussum, Holland
See Visser, Exhibition of Chinese Art, Amsterdam, 1925, pl. vi
Berlin Exhibition, 1929, No. 46.

244

CHAIR-FOOT

Bronze. Height 8·8 cm. Length 18 cm.
Shang-Yin dynasty
Lent by the British Museum (Eumorfopoulos Collection)

207

DAGGER (KO)

Yellow jade, with bronze handle. Length 28 cm.
Shang-Yin dynasty
Lent by A. Hellström, Mölndal, Sweden

PLATE 22

*

217

GROUP

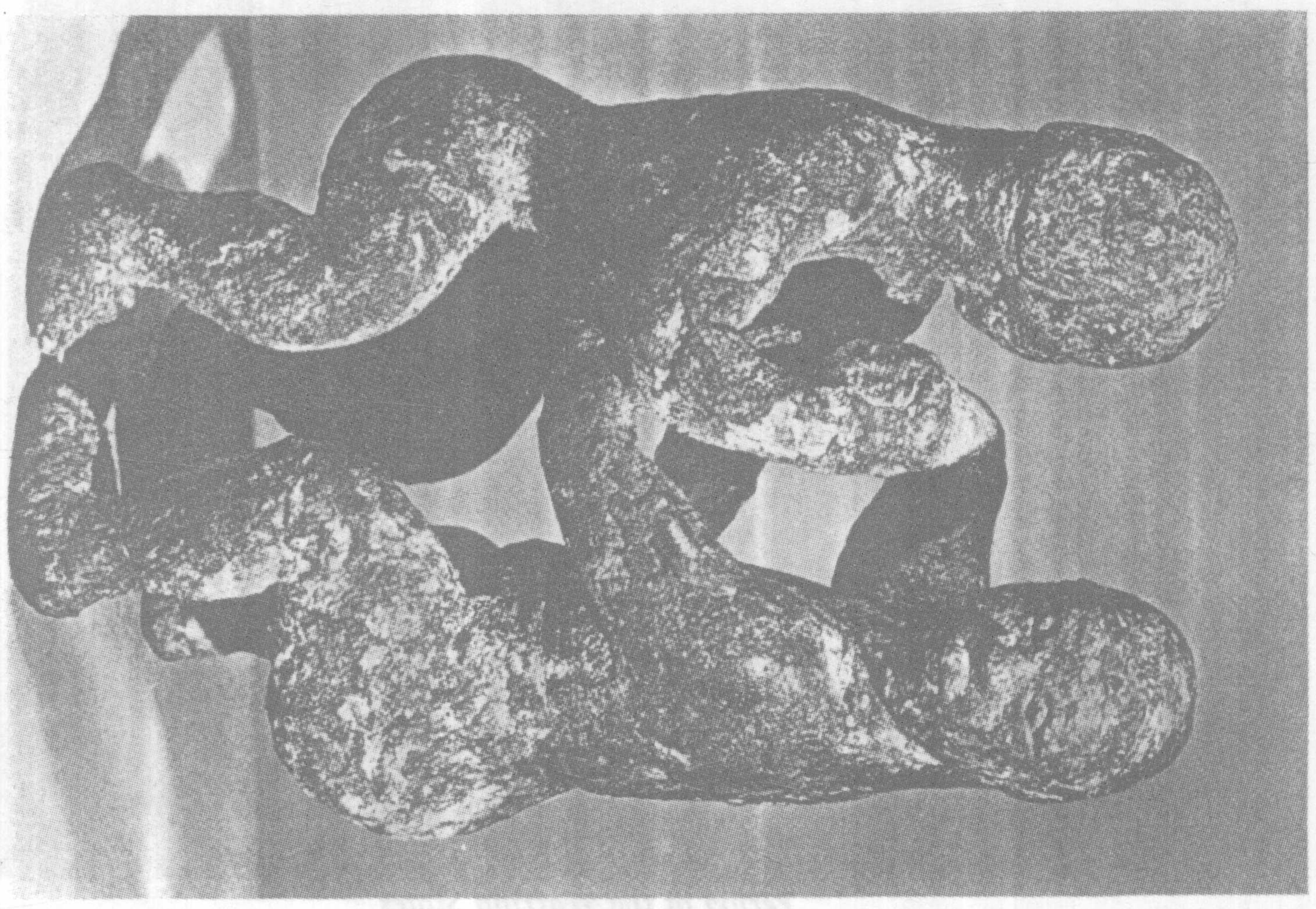
Bronze. Wrestlers. Height 15·3 cm. Width 15·3 cm.
Chou dynasty
Lent by Captain E.G. Spencer-Churchill, Blockley, Worc.

242

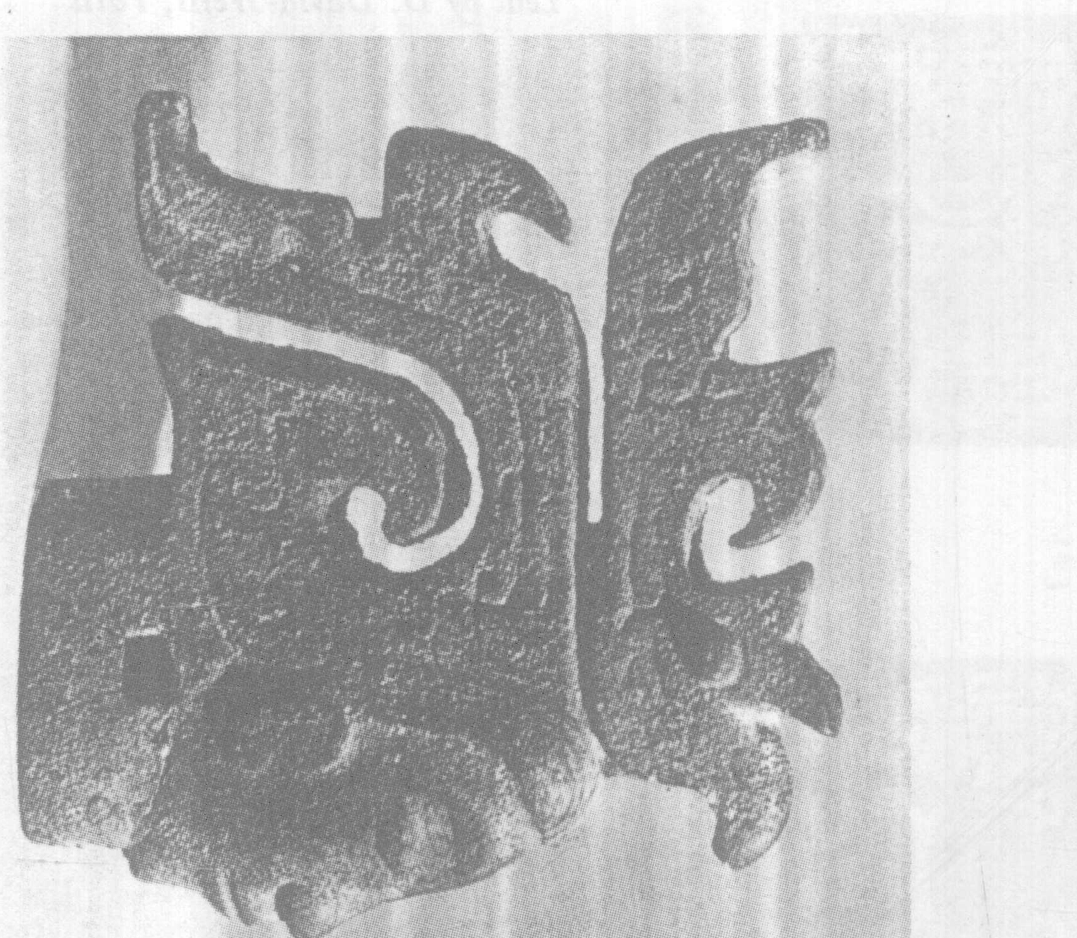
FINIAL OF AN AXE HANDLE

Bronze. Height 7 cm.
Chou dynasty ?
Lent by Oscar Raphael, London

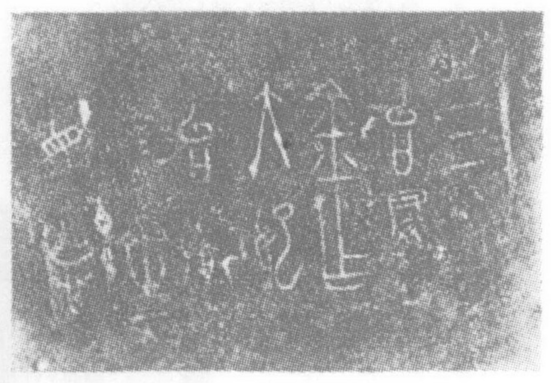
217



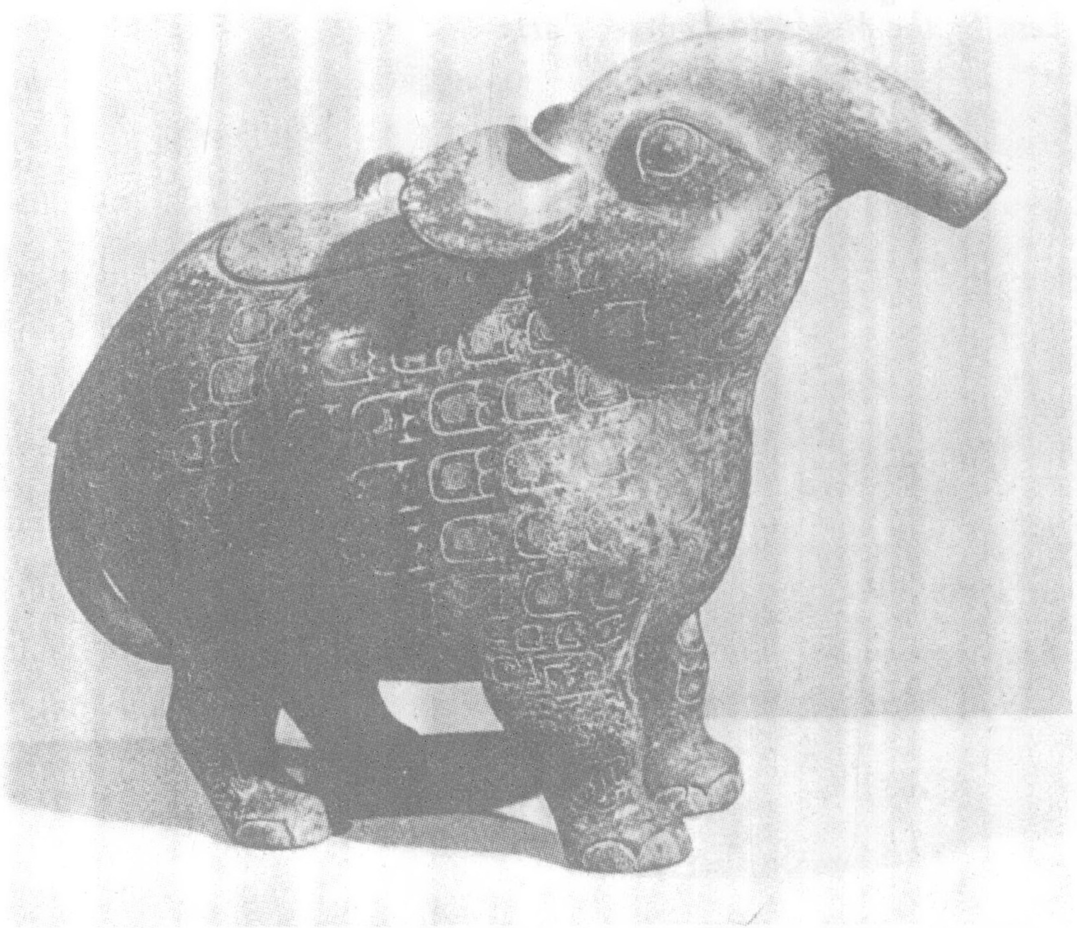
242







74





165

PLATE 23

*

74
HU (WINE-VESSEL)
Bronze. Height 47·7 cm.
Period of the Spring and Autumn Annals
(Inscription also reproduced)
Lent by the Chinese Government

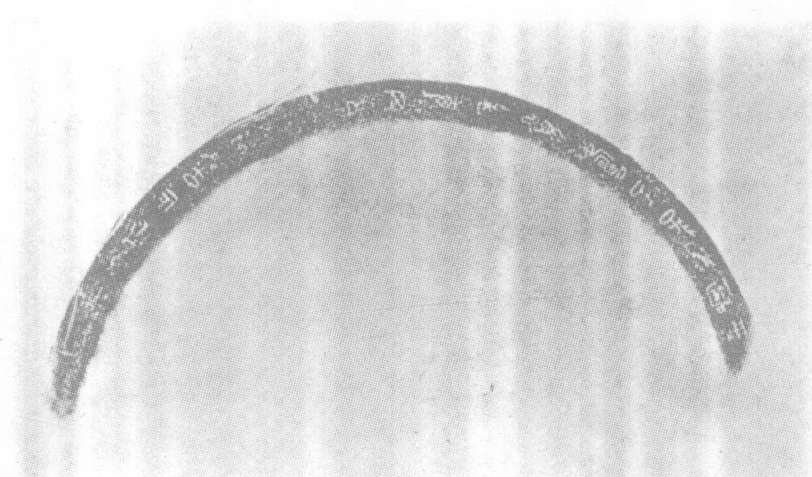
165
TSUN (WINE-VESSEL)
Bronze. Height 26 cm.
Period of the Spring and Autumn Annals
(Inscription also reproduced)
Lent by H.G. Oeder, Altmark, Germany

PLATE 24

*

88
TING (CALDRON)
Bronze. Shih State. Height 30·2 cm.
Period of the Spring and Autumn Annals
(Inscription also reproduced)
Lent by the Chinese Government

87
KUEI (FOOD VESSEL)
Bronze. Height 33 cm.
Ch'i State. 384-378 B.C.
(Inscription also reproduced)
Lent by the Chinese Government



88



87



112



PLATE 25

112

P'AN (BASIN)

Bronze. Width 44 cm.
Period of the Warring States
Lent by the Musée du Louvre, Paris

PLATE 26

*

122

APPLIQUÉ

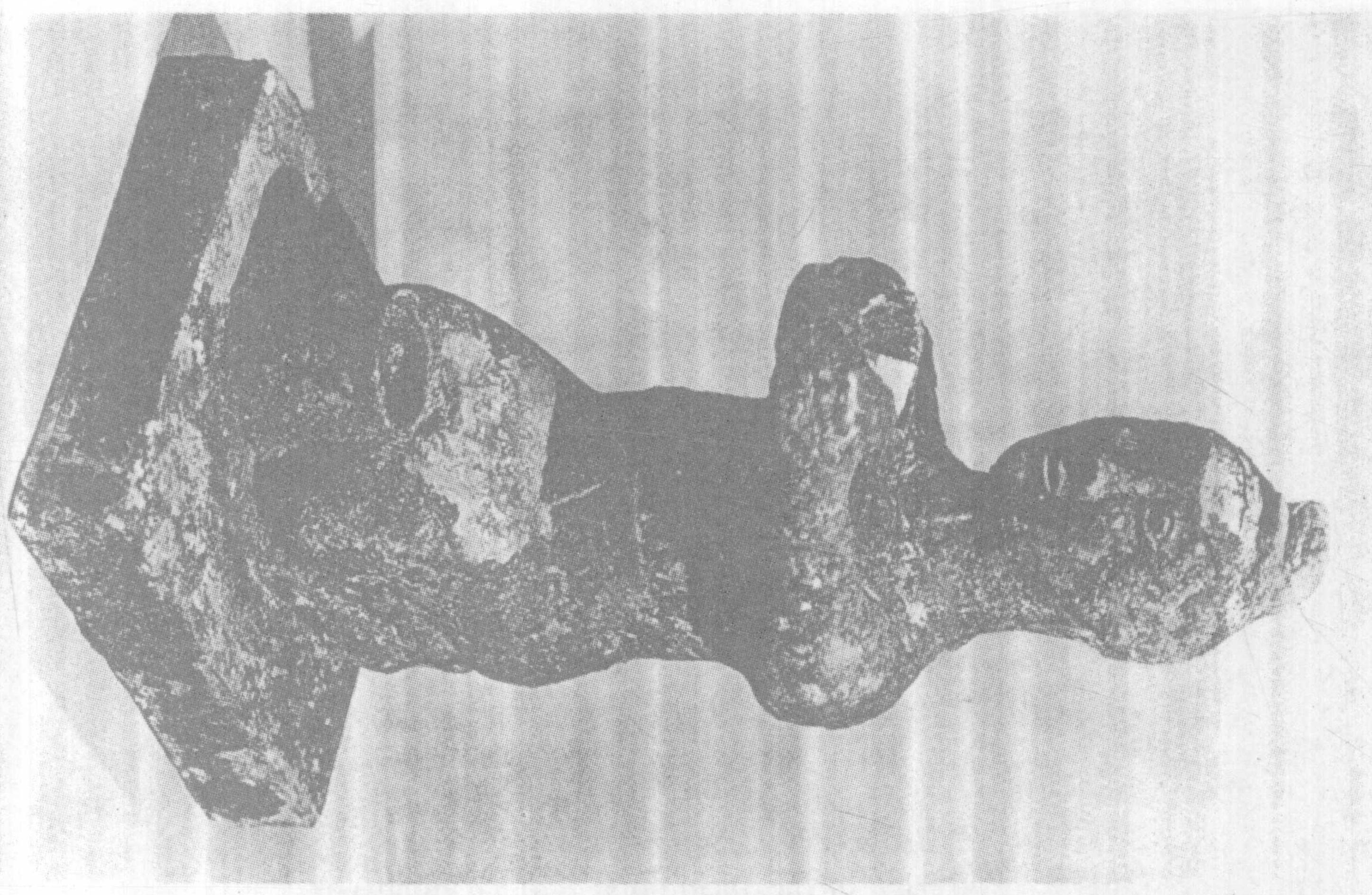
Bronze. Height 18 cm.
Period of the Warring States
Lent by J. Homberg, Paris

126

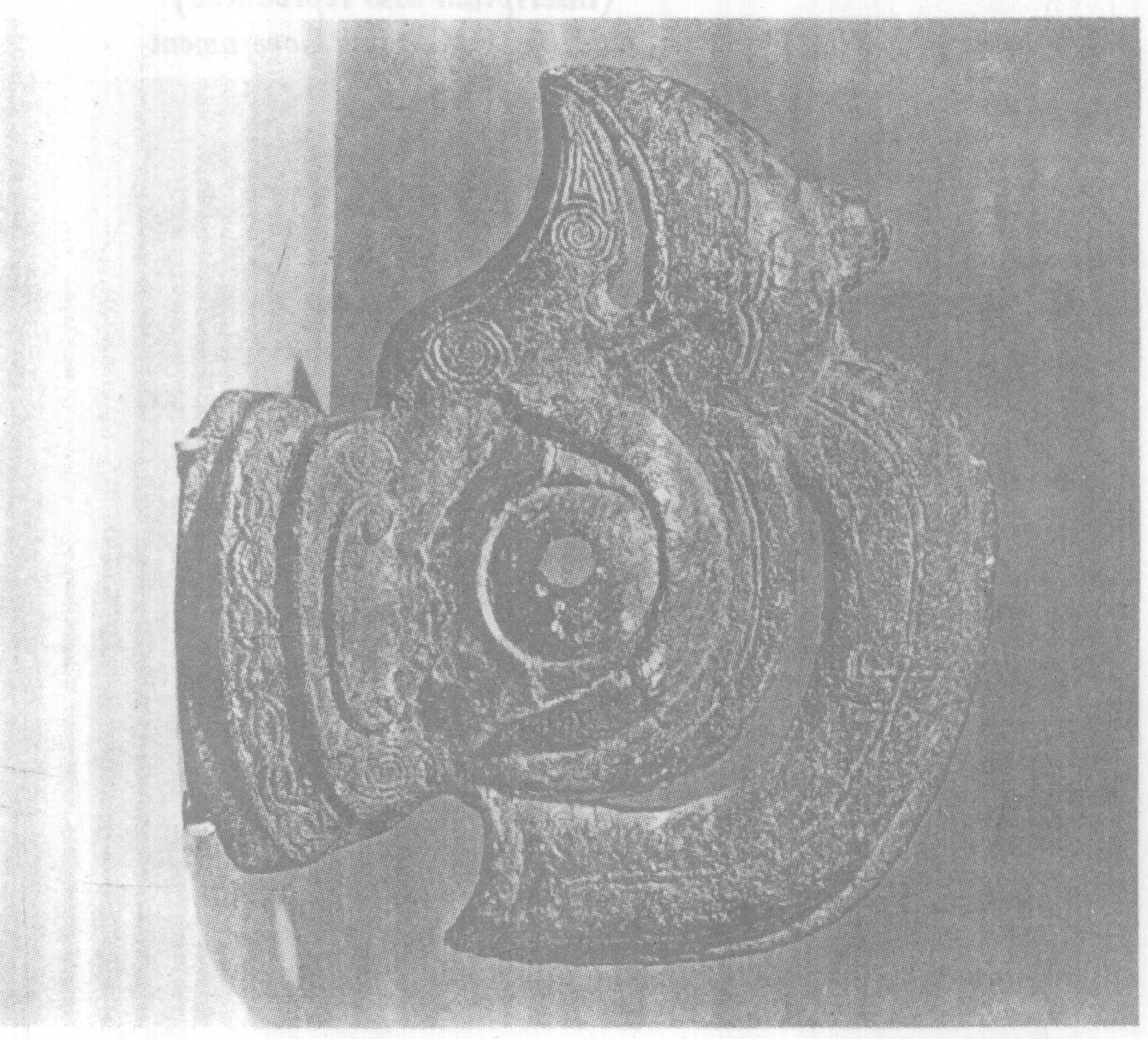
KNEELING FIGURE

Bronze. Height 25 cm.
c. 5th century B.C.
Lent by Raymond A. Bidwell, Springfield, Mass.

126



122



94



135



PLATE 27

*

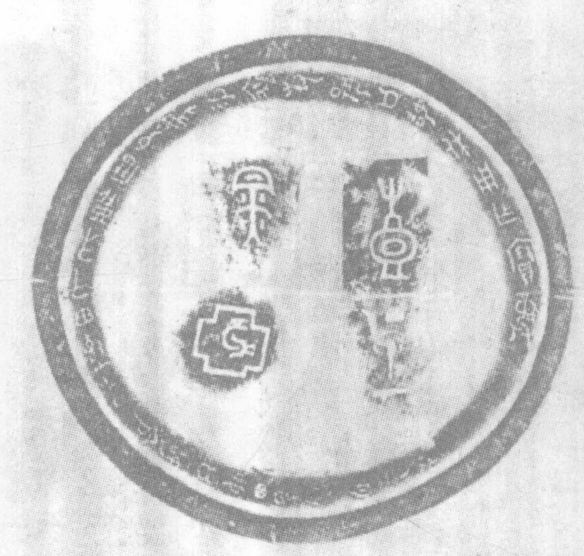
94
TOU (FOOD-VESSEL)
Bronze. Height 17 cm.
Period of the Warring States
Lent by the Chinese Government

135
OVAL VESSEL
With figures of two frogs. Bronze. Length 24·1 cm.
Han dynasty or later
Lent by Mrs. Christian R. Holmes, New York

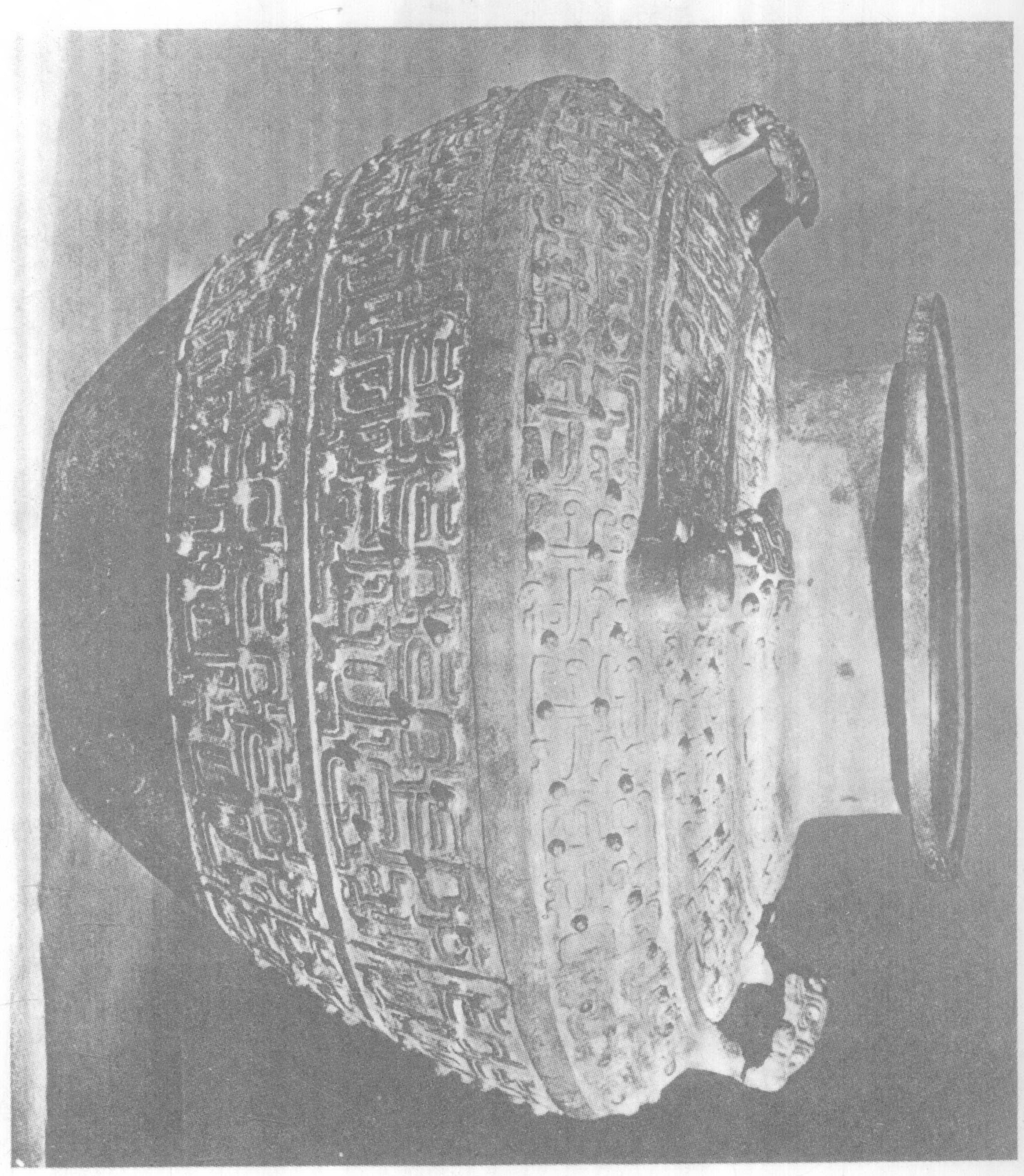
PLATE 28

*

145
LEI (WINE VESSEL)
Bronze. Height 25 cm.
Period of the Spring and Autumn Annals
(Inscription also reproduced)
Lent by Prof. and Mrs. C.G. Seligman, Toot Baldon, Oxford



145



105



102

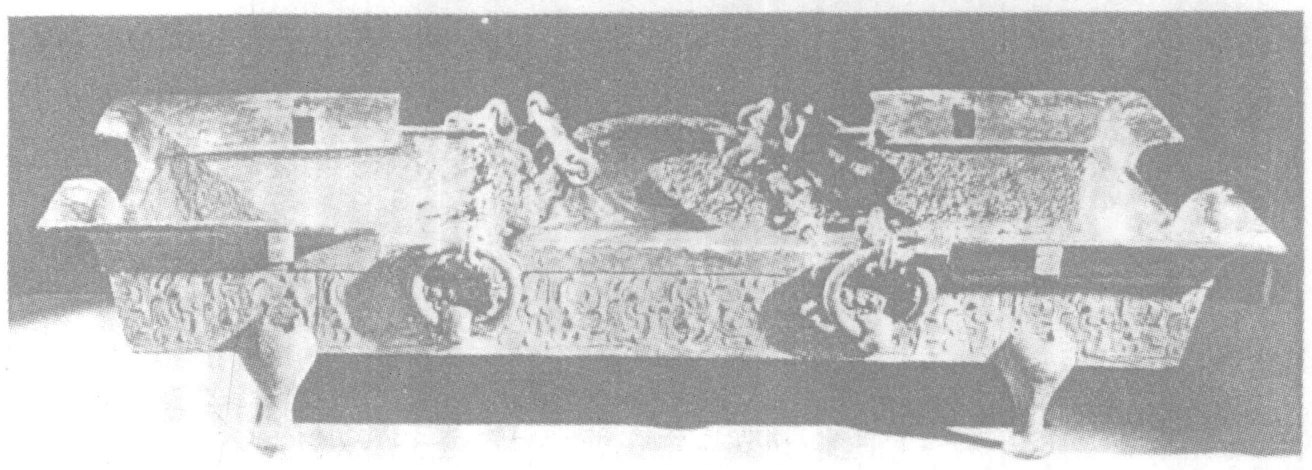


PLATE 29

*

105

TING (CALDRON) AND COVER

Bronze
Period of the Warring States
Lent by the Chinese Government

102

RECTANGULAR TRAY

Bronze. Length 52 cm. Width 32 cm.
Ch'u State. c. 241-222 B.C.
Lent by the Chinese Government

PLATE 30

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66

PO (BELL)

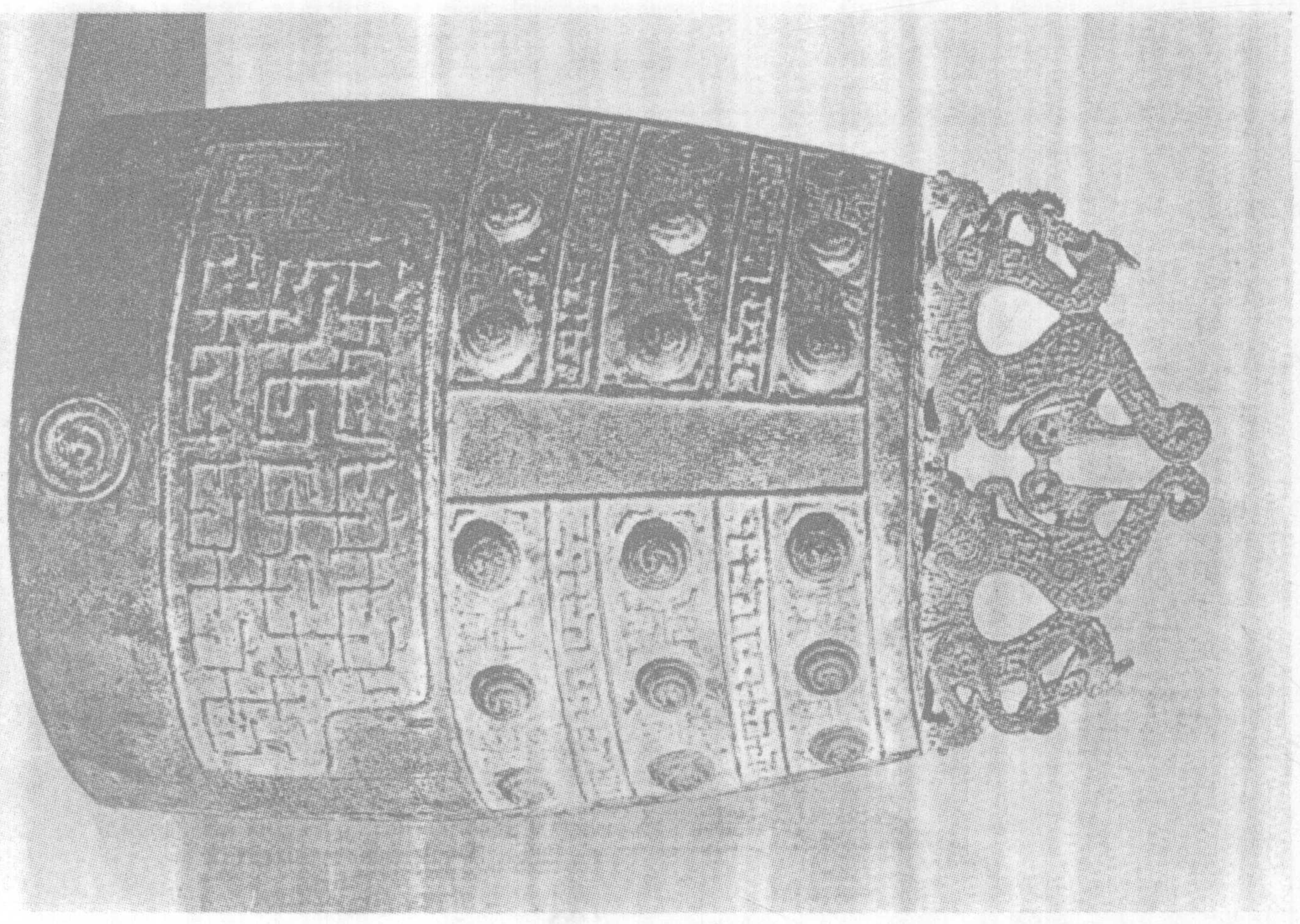
Bronze. Height 58 cm.
Period of the Warring States
Lent by the Chinese Government

144

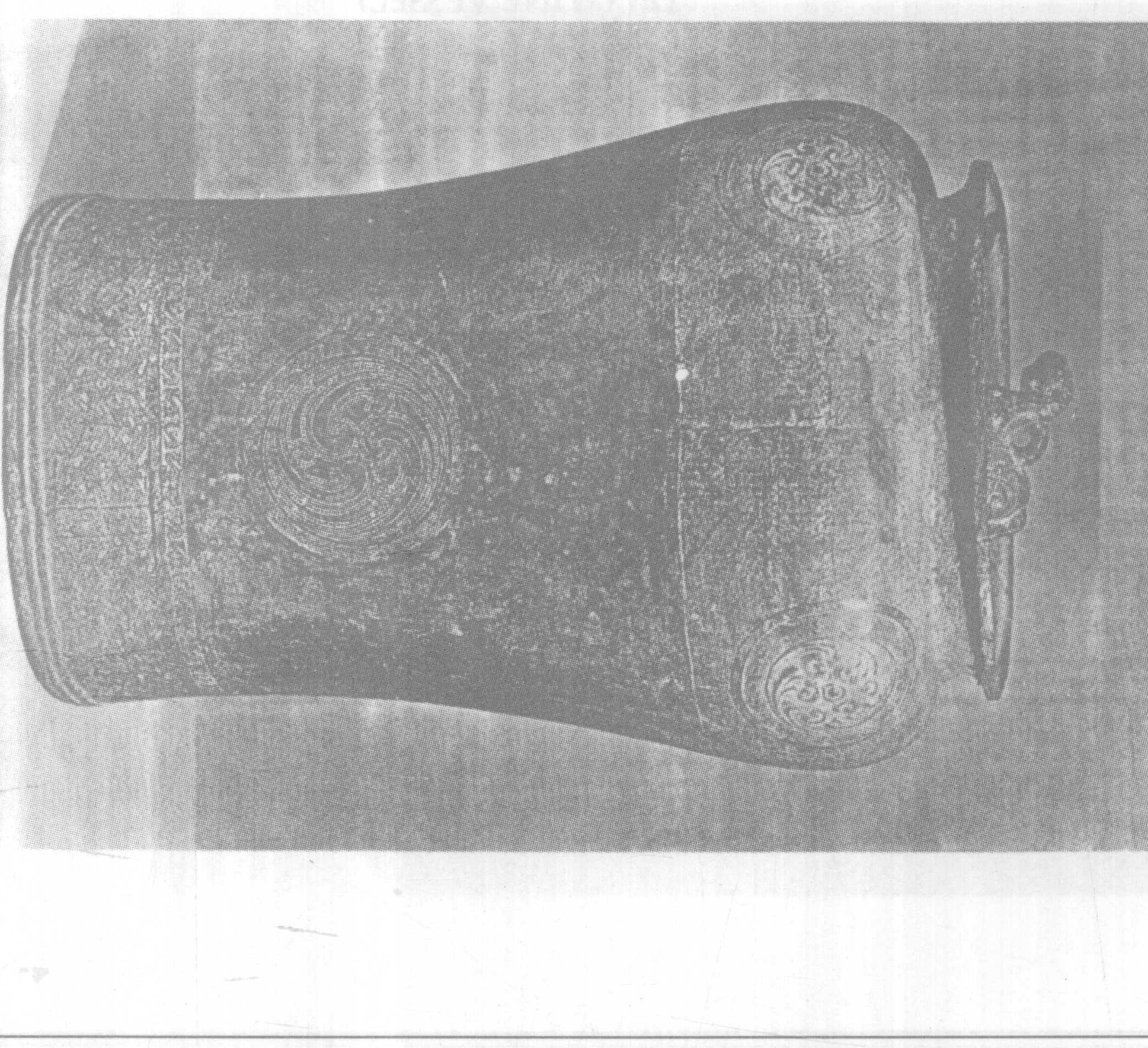
CH'UN (BELL)

Bronze. Height 38 cm.
Period of the Warring States
Lent by Östasiatiska Samlingarna, Stockholm
See Östasiatiska Samlingarna, *Bulletin*, No. 6, pl. xxviii, etc.

66



144



142



99

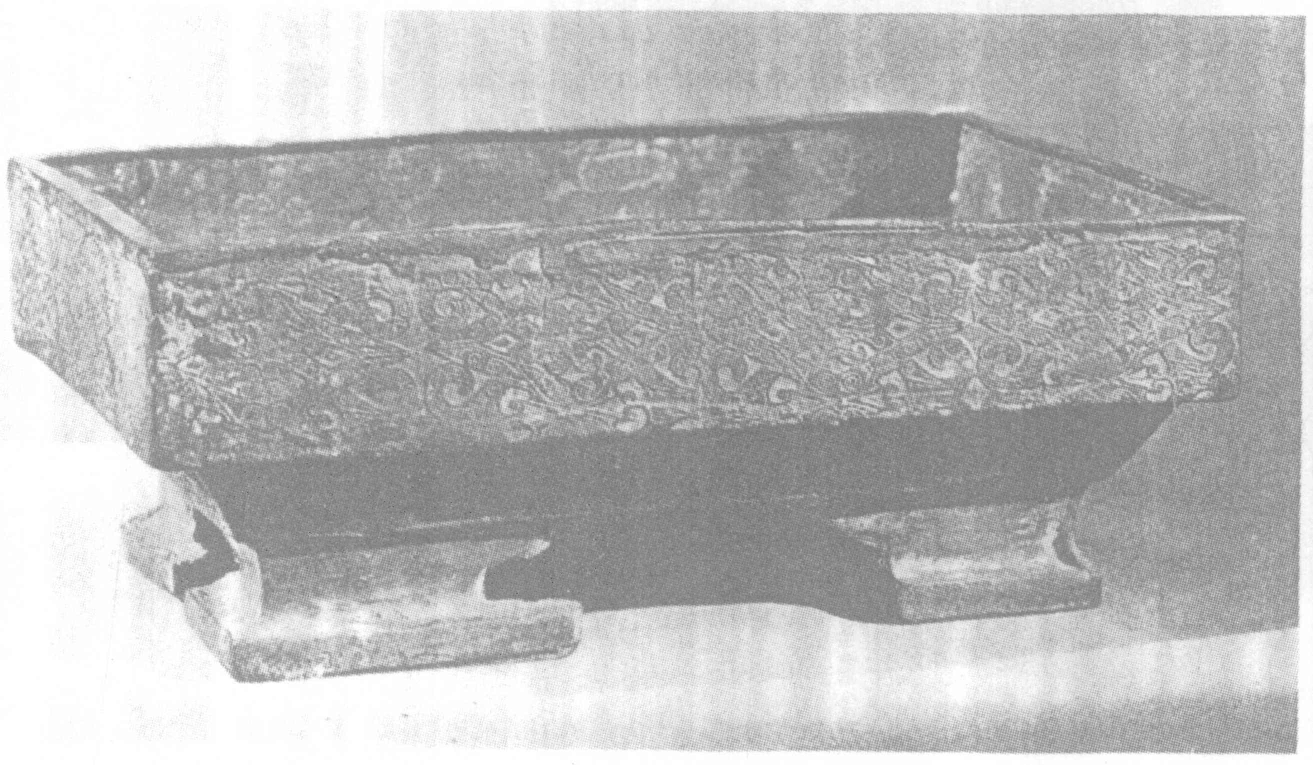




PLATE 31

*

142
HU (WINE-VESSEL)
Bronze, inlaid with gold and silver. Height 26·5 cm.
Period of the Warring States
Lent by G. Pilster, Berlin

99
FU (FOOD-VESSEL)
Bronze. Length 35 cm.
Ch'u State. Probably 241-222 B.C.
(Inscription also reproduced)
Lent by the Chinese Government

PLATE 32

*

81
GOURD-SHAPED HU (WINE VESSEL) AND COVER
Bronze. Height 33·5 cm.
Period of the Warring States
Lent by the Chinese Government

82
I (EWER)
Bronze. Length 27 cm.
Period of the Warring States
Lent by the Chinese Government
Inside the vessel are incised figures of a duck and a fish

81



82

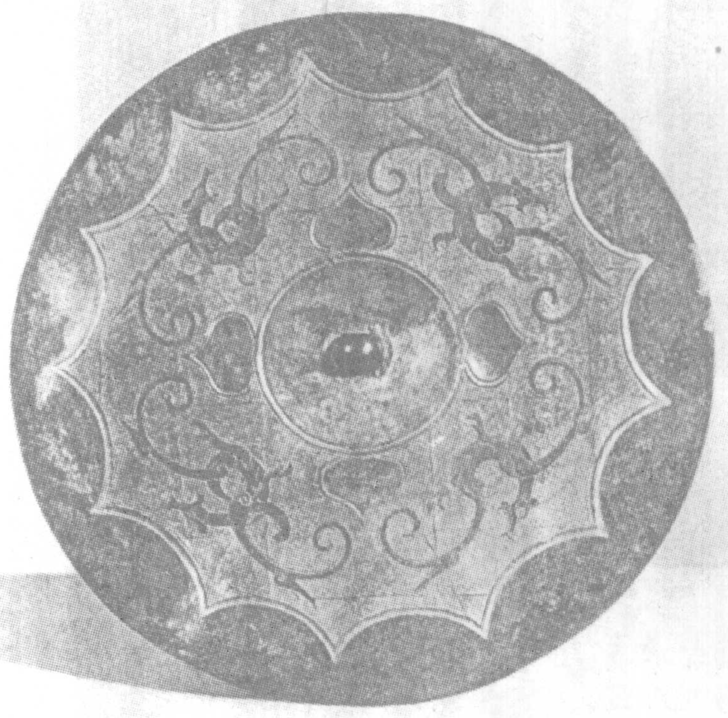




452



449



445



465

PLATE 33

*

452
MIRROR-BACKS
Diameter 18·5 cm.
Period of the Warring States
Lent by the Musée Guimet, Paris

449
Diameter 17·9 cm.
Period of the Warring States
Lent by Raymond A. Bidwell, Springfield, Mass.

445
Diameter 22 cm.
Period of the Warring States
Lent by M. Calmann, Paris

465
Diameter 13·2 cm.
Han dynasty
Lent by M. Calmann, Paris

PLATE 34

*

490
MIRROR-BACKS
Diameter 13·9 cm.
Han dynasty
Lent by D. David-Weill, Paris

491
Diameter 10·2 cm.
Dated A.D. 121
Lent by Oscar Raphael, London

506
Diameter 20·9 cm.
3rd century A.D.
Lent by the Metropolitan Museum of Art, New York

499
Diameter 24·2 cm.
Period of the Six Dynasties
Lent by H. Ginsberg, Berlin



490



491



506



499



509



511



510

PLATE 35

*

509
THREE GILT-BRONZE BEARS
Height 17·7 cm.
Han dynasty
Lent by H. J. Oppenheim, London

511
Height 15·7 cm.
Han dynasty
Lent by A. Stoclet, Brussels

510
Height 13·6 cm.
Han dynasty
Lent by the City Art Museum of St. Louis, Missouri

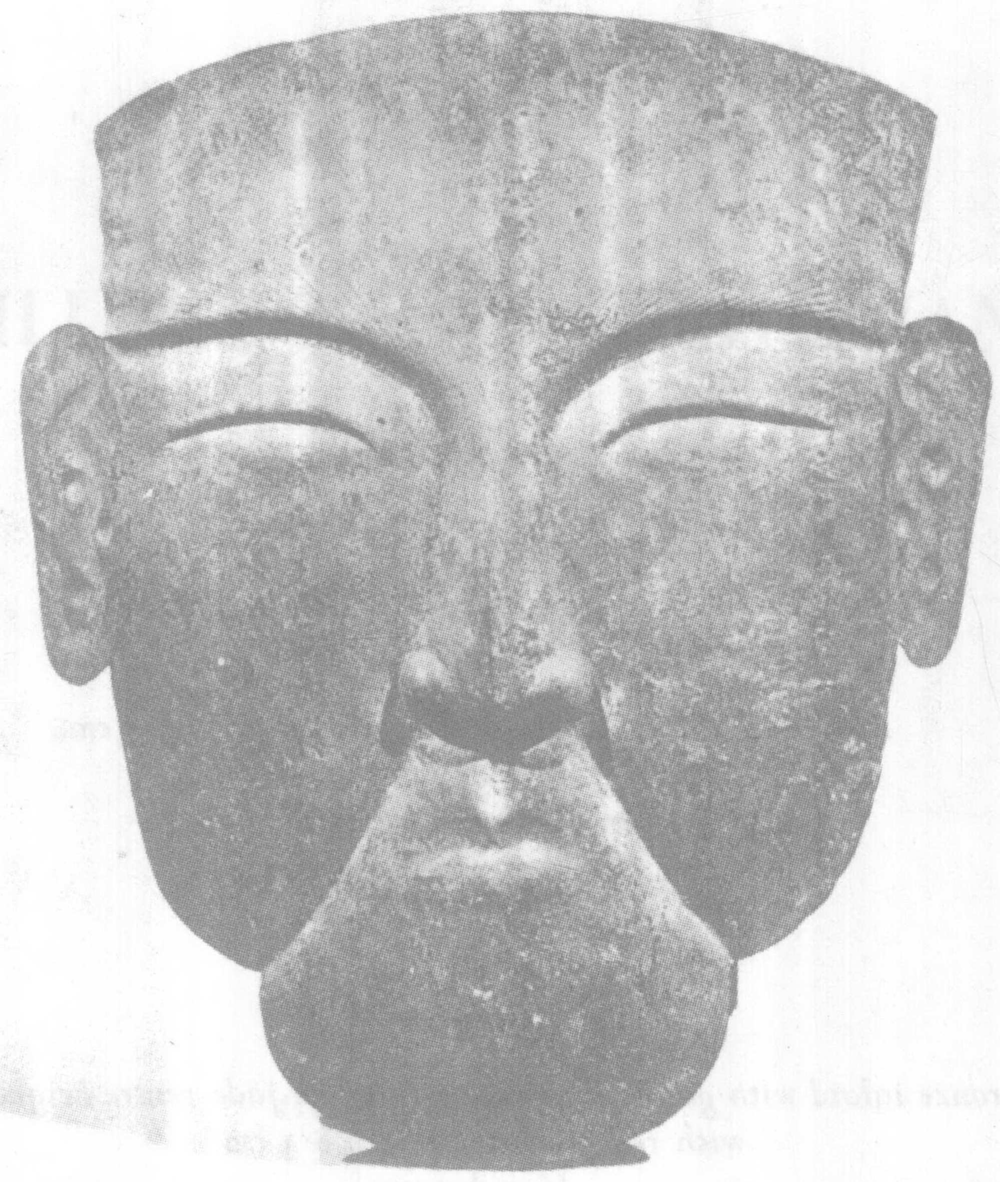
PLATE 36

*

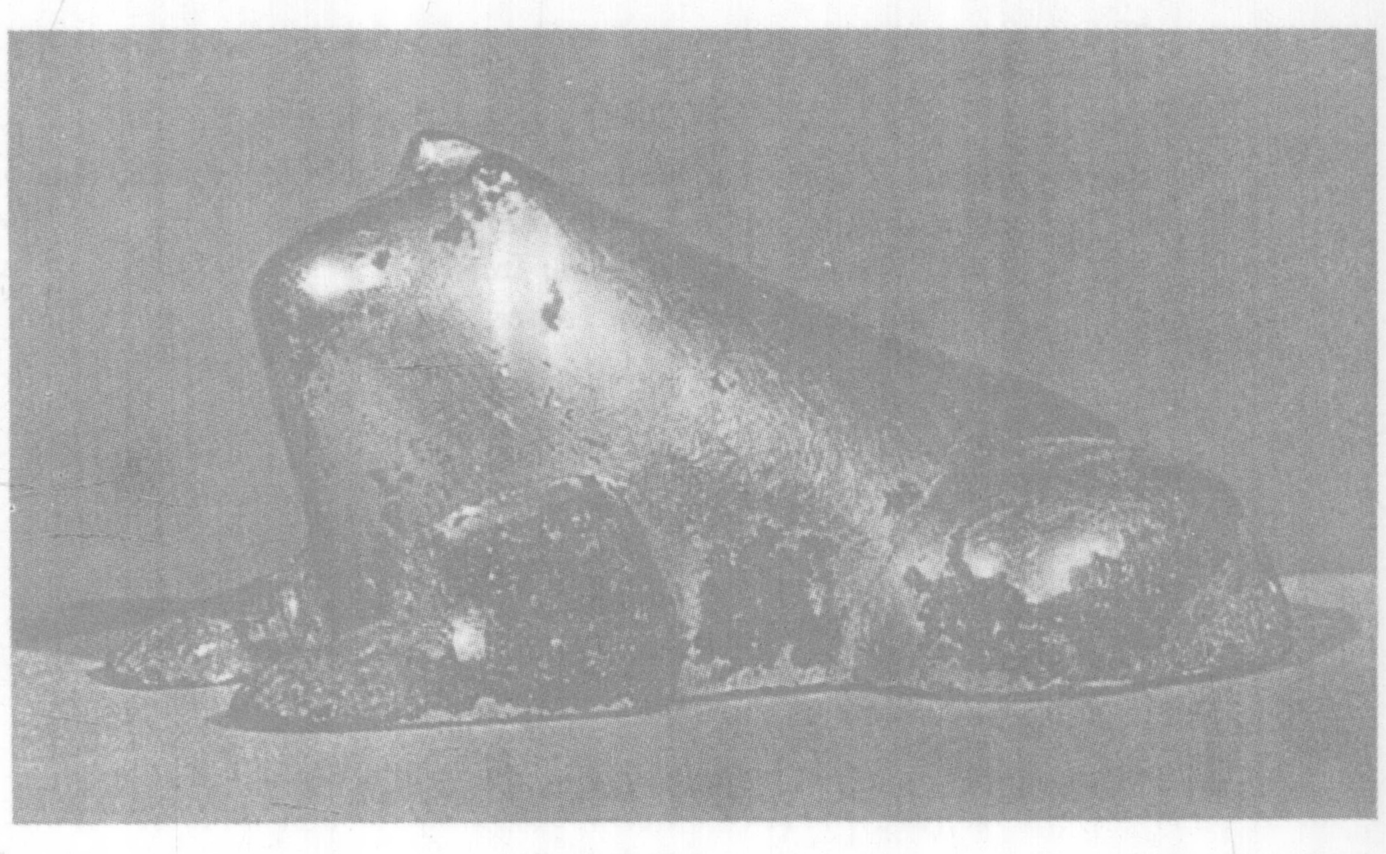
442
DEATH MASK
Gilt bronze. Height 22 cm.
Han dynasty
Lent by the Kyoto Imperial University

513
PAPER-WEIGHT
Gilt bronze. Length 6·8 cm.
Han dynasty
Lent by the British Museum (Eumorfopoulos Collection)

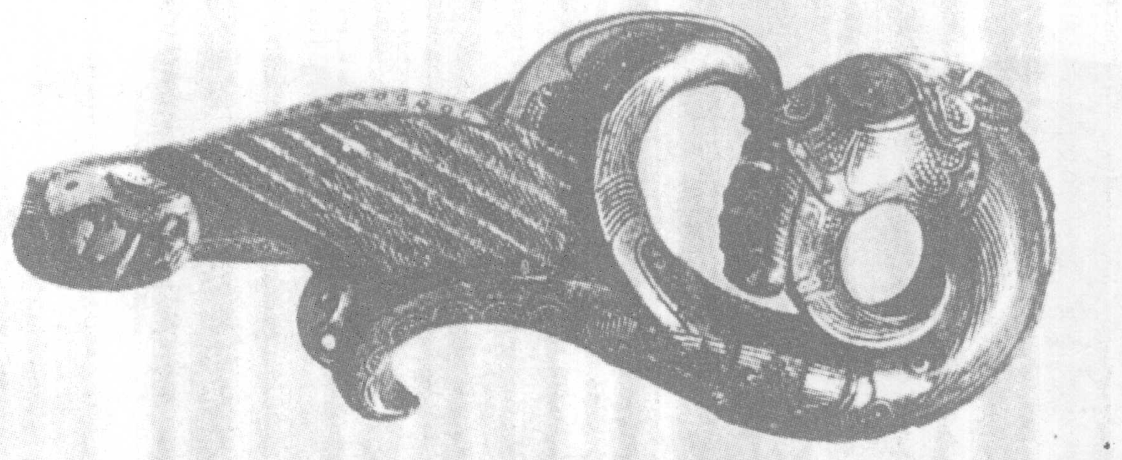
442



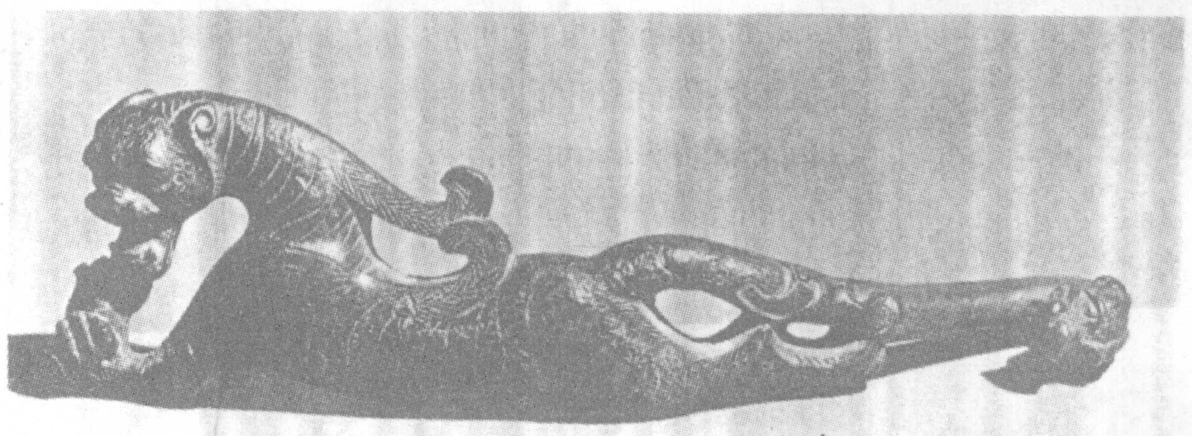
513



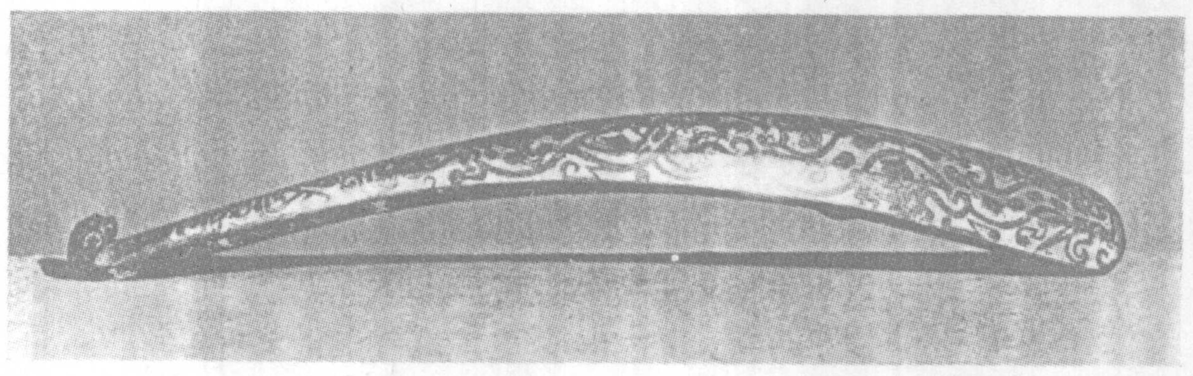
533



527



378



550

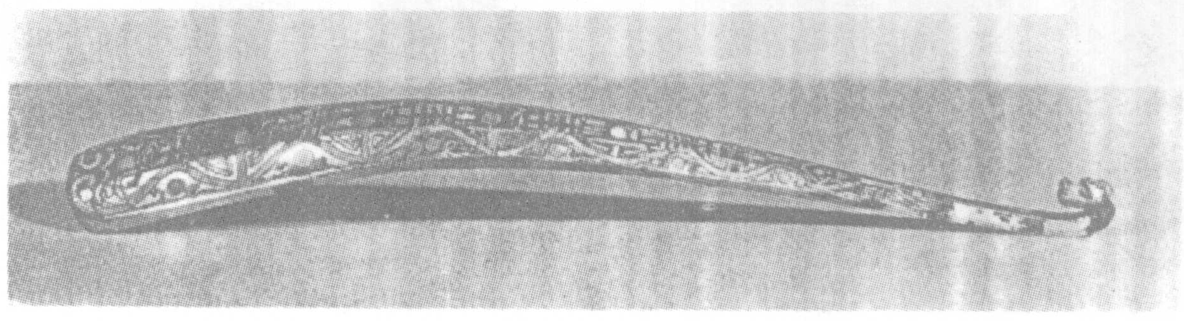


PLATE 37

*

533
CLOAK-HOOKS

Bronze, inlaid with gold, silver and turquoise. Length 8·2 cm.
Han dynasty
Lent by H.J. Oppenheim, London
See Ashton and Gray, *Chinese Art*, pl. 15

527

Bronze. Length 16 cm.
Han dynasty
Lent by Oscar Raphael, London

378

Gilt-bronze, inlaid with silver. Length 22·8 cm.
Han dynasty
Lent by Mrs. Christian R. Holmes, New York

550

Gilt-bronze, inlaid with turquoise. Length 34·1 cm.
Period of the Six Dynasties
Lent by Alfred F. Pillsbury, Minneapolis, U.S.A.

PLATE 38

*

397
TUBE

Bronze inlaid with gold and silver. Length 27·9 cm.
Han dynasty
Lent by Marquis Goryu Hosokawa, Tokyo
Japanese National Treasure B.

388
BUCKLE

Bronze inlaid with gold and silver, pale green jade centre heightened with red pigment. Width 8·3 cm.
Han dynasty
From the Lucy Maud Buckingham Collection, Chicago

389
SWORD

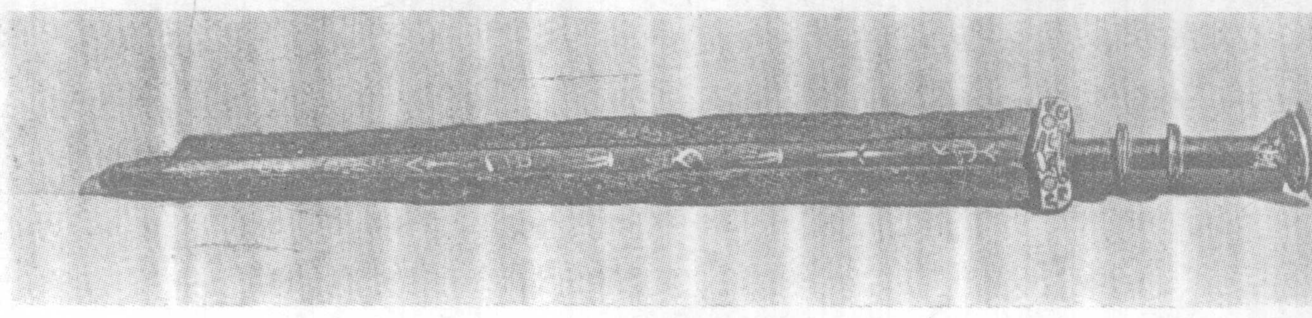
Bronze, the pommel of jade. The blade inlaid with a gold inscription, the guard with gold and turquoise. Length 5·75 cm.
Period of the Warring States
Lent by the Musée du Louvre, Paris



397



388



389

使華訪古錄

北平孫壯題

SAMMLUNG OSKAR TRAUTMANN

VORWORT

Der Sammler der hier veröffentlichten Bronzen hatte das Glück, sich während der Jahre reicher Funde zu An-yang, Hsün-hsien, Lo-yang und an anderen historischen Stätten Nordchinas in Peking aufzuhalten. Er bekam damals zahlreiche Stücke zu Gesicht, aus denen er, seinem Geschmacke folgend, die ihm zusagenden auswählte. Wenn er dabei nicht das Bestreben hatte, eine Lehrsammlung zusammenzustellen, so war ihm doch daran gelegen, die Mannigfaltigkeit der Schmuckformen wenigstens einigermassen zur Anschauung zu bringen. Er bevorzugte Stücke, die heute mit Sicherheit[1] als solche der Shang-Dynastie oder der frühen Chou-Zeit angesprochen werden, ohne dabei die späteren Stile bis zur Zeit der Kämpfenden Staaten zu vergessen. Auf eine Vollständigkeit von Beispielen an Gefässtypen und Dekor wurde aber, wie schon angedeutet, bewusst kein Wert gelegt. Trotzdem glaubt der Herausgeber, dass der Kern der Sammlung Trautmann, wie er hier im Bilde vorliegt, manche Stücke enthält, welche die bekannten Kataloge und Grossveröffentlichungen bestätigen oder ergänzen.

---

1) S. vor allem die jetzt im Druck erschienene Rede Professor Pelliots, **The Royal Tombs of An-yang**, gehalten anlässlich der Ausstellung Chinesischer Kunst in der Königlichen Akademie der Künste zu London im Winter 1935-6; veröffentlicht als Kap. IV von **Studies in Chinese Art and Some Indian Influences**, The India Society, London, 1938; ferner die grundlegende Arbeit Professor Karlgrens, **Yin and Chou in Chinese Bronzes**, The Museum of Far Eastern Antiquities, Bulletin No. 8, Stockholm, 1936. Vgl. auch H. G. Creel, **The Birth of China**, Kap. VII und passim, London, 1936.

2) **Yeh-chung p'ien-yü ch'u-chi, êrh-chi,** 鄴中片羽初集，二集, Peiping, 1935, 1937; **Tsun-ku-chai so-chien chi-chin-t'u ch'u-chi** 尊古齋所見吉金圖初集, Peiping, 1936, beide im Selbstverlag.

3) Kap. I und II, Bde. 2, 1936-7, und 4, 1939 (im Erscheinen).

4) Vor allem von B. Karlgren in **New Studies on Chinese Bronzes**, a. a. O., Bulletin No. 9, Stockholm, 1937; vgl. ferner M. Löhr, **Beiträge zur Chronologie der älteren chinesischen Bronzen**, Ostasiatische Zeitschrift, Bd. 22, 1936, pp. 3-41.

Leider konnte das angekündigte grosse Bronze-Werk von Professor Yetts bei der Vorbereitung dieses Katalogs noch nicht zu Rate gezogen werden.

5) S. d. Katalog der Ausstellung, mit einer Einführung von Alan Priest, **Chinese Bronzes of the Shang through the T'ang Dynasty**, an Exhibition lent by American Collectors and Museums and shown from October 19 through November 27, The Metropolitan Museum of Art, New York, 1938; ferner den Bericht über die Ausstellung von A. Salmony, **Ancient Chinese Bronzes in New York**, The Burlington Magazine, December 1938.

6) **Yin Chou li-yüeh-ch'i k'ao-lüeh** 殷周禮樂器考略, Yen-ching hsüeh-pao 燕京學報, Yenching University, Juni 1927; vgl. auch den englischen Auszug von John Hefter im **Yenching Journal of Chinese Studies**, Supplement No. 1, pp. 7-15, ibd., 1932.

FRÜHE CHINESISCHE BRONZEN

AUS DER

SAMMLUNG OSKAR TRAUTMANN

HERAUSGEGEBEN

VON

GUSTAV ECKE

Peking

1939

I, 1-2

鼎

Ting, Höhe bis zum Gefässrand 193 mm.

Blaugrüne Patina aussen auf den erhabenen Stellen, Bronzefarbe an den patinafreien Stellen grau mit bräunlicher Tönung; innen dicke Bodenkruste; Spuren schwarzer Pigmenteinlage in den vertieften Mustern der Füsse.

Inschrift: ein Zeichen am Innenrand

Fundort vermutlich An-yang

Ein Teil dieser Bronzen befindet sich als Leihgabe in der Ostasiatischen Abteilung der Staatlichen Museen zu Berlin. Dieser Katalog wendet sich nunmehr an einen weiteren Kreis von Liebhabern und Gelehrten, die das Vergleichsmaterial nicht ungern begrüssen dürften.

Einige der Stücke wurden in Peking schon früher bekannt durch die Materialsammlungen[2] des Herrn Huang Po-ch'uan 黃伯川, der als Kenner alter Schule mit solchen Arbeiten der Archäologie schon manche wertvollen Dienste geleistet hat. Herr W. Perceval Yetts und der Herausgeber besprachen andere Gefässe in den *Notes on Early Bronzes* der *Monumenta Serica*[3]. Herr Jung Kêng 容庚 nahm eine Reihe von Bronzen der jetzigen Sammlung Trautmann in das Abbildungsmaterial auf, welches als neue, erweiterte Typologie demnächst erscheinen soll.

In diesem Katalog jedoch sieht der Herausgeber von einer Analyse der Schmuckformen und einer Behandlung besonderer Stilprobleme ab. Wir wissen, wie sehr man sich, hervorragenden Versuchen zum Trotz[4], noch in den Anfangsgründen einer genaueren Deutung der frühen Bronzen befindet. Gerade jetzt wieder weist das Echo der Ausstellung in New York[5] auf diese unerschöpfte Problematik hin; der Herausgeber glaubte daher, sich hier noch der herkömmlichen chinesischen Ordnung anschliessen zu sollen. Er folgte auch darin chinesischem Vorbilde, dass er Abbildungen von Abklatschen bringt, aus denen alle Einzelheiten des Dekors abgelesen werden können.

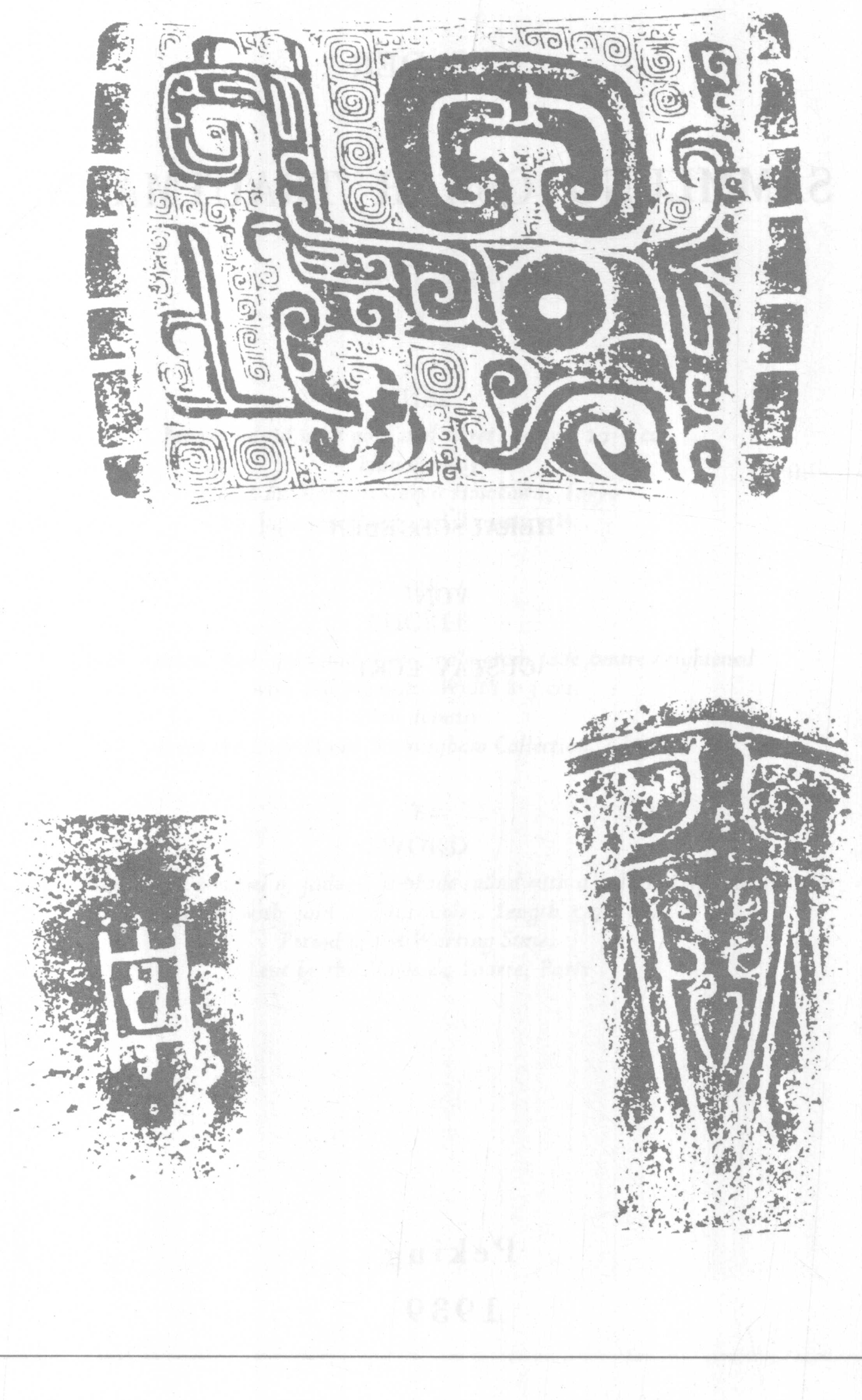
Die Bezeichnung der Typen wurde hauptsächlich der noch massgebenden Arbeit Jung Kêngs aus dem Jahre 1927 entnommen[6]. Die Fundorte waren durchweg nicht sicher nachweisbar, doch konnte bei den früheren Stücken die vermutliche Herkunft meistens angegeben werden.

Herr Jung Kêng hatte die Freundlichkeit, dem Katalog einen Namen zu geben, der auf die Bemühungen des Sammlers hinweist. Herr Sun Po-hêng 孫伯恆 schuf diesem Titel eine klassische Form. Herr Ernst Schierlitz half bei der Vermessung und Beschreibung der Bronzen. Diesen Herren, sowie anderen kollegialen Ratgebern übermittelt der Besitzer der Sammlung seinen verbindlichsten Dank.

Gustav Ecke

Universität Fujen

Januar 1939







II, 1-2

鼎

Ting, Höhe bis zum Gefässrand 185 mm.

Aussen gleichmässig graublau-grüne Patina mit matt-hellgrauen, hell-graublauen und matt-rostroten Stellen; innen gleichmässig graugrüner Überzug mit kleinen Pusteln; am Boden heller, glatter Fleck.

Inschrift: zwei unleserliche Zeichen am Innenrand

Fundort vermutlich An-yang

III, 1-2

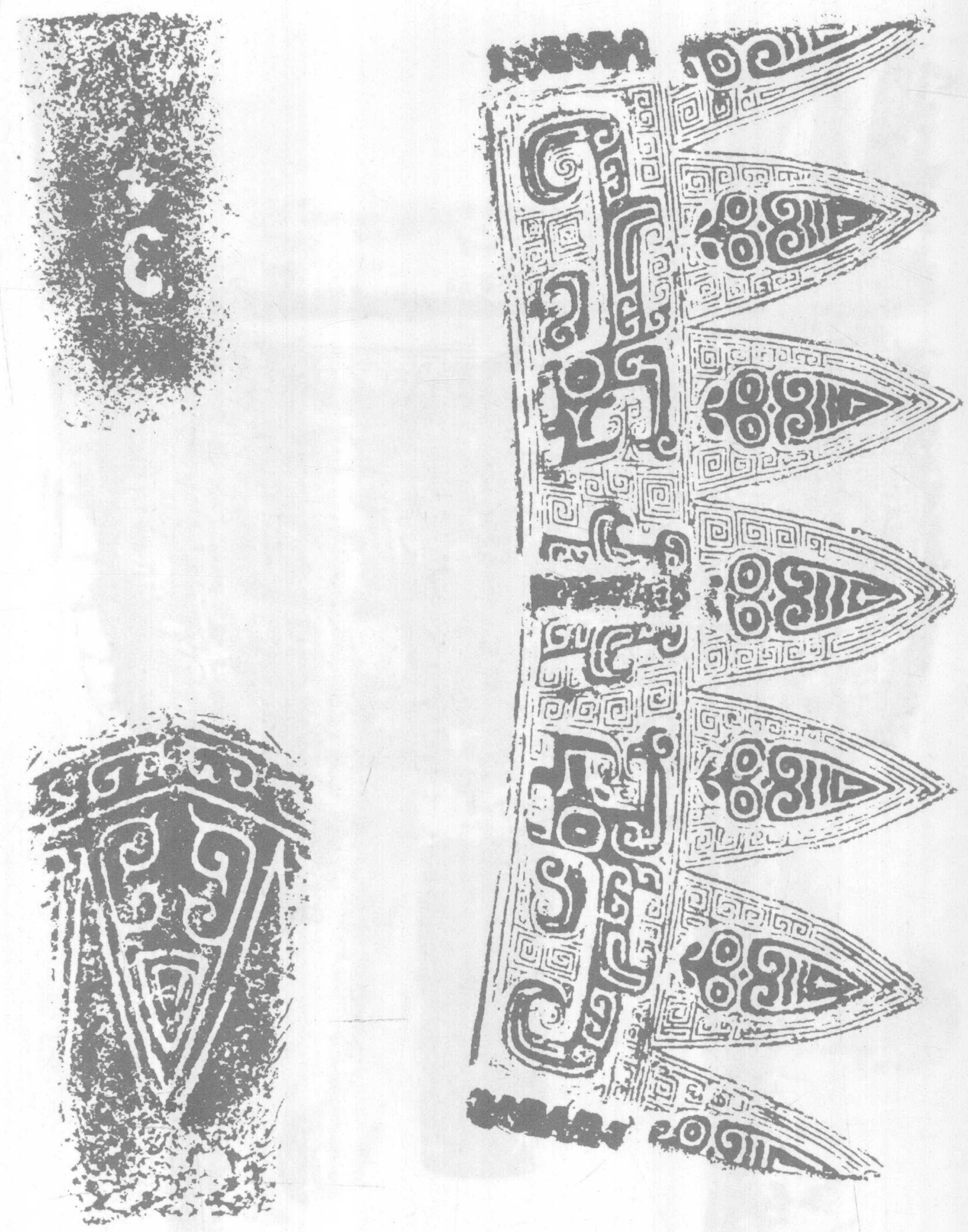
鼎

Ting, Höhe bis zum Gefässrand 310 mm.

Patina aussen dunkel-malachitfarben, mit grösseren blaugrünen, einigen mattroten Flecken und blauen Pusteln; innen stellenweise dick inkrustiert.

Inschrift spätere Hinzufügung

Fundort vermutlich An-yang









IV, 1-2

鼎

Ting, Höhe bis zum Gefässrand 179 mm.

Aussen spärliche mattgrüne Patina; innen Spuren einer flüssigen Einlage, mattgrüne Lackpatina, Pusteln.

Fundort vermutlich An-yang

V, 1-2

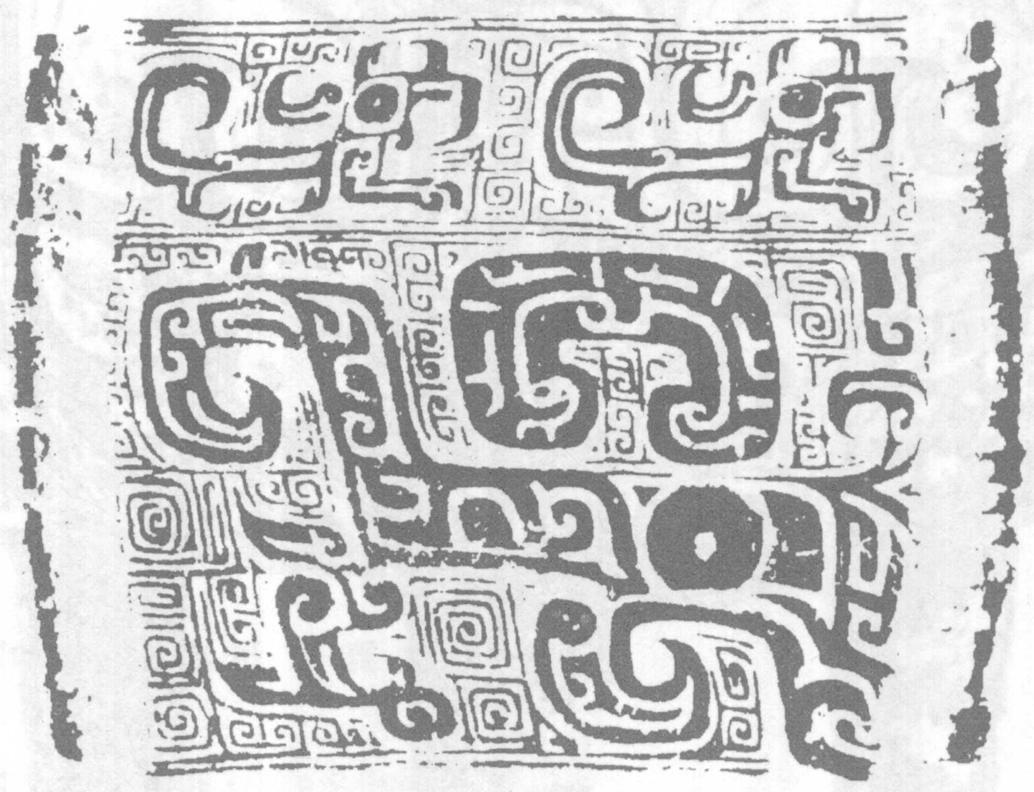
鼎

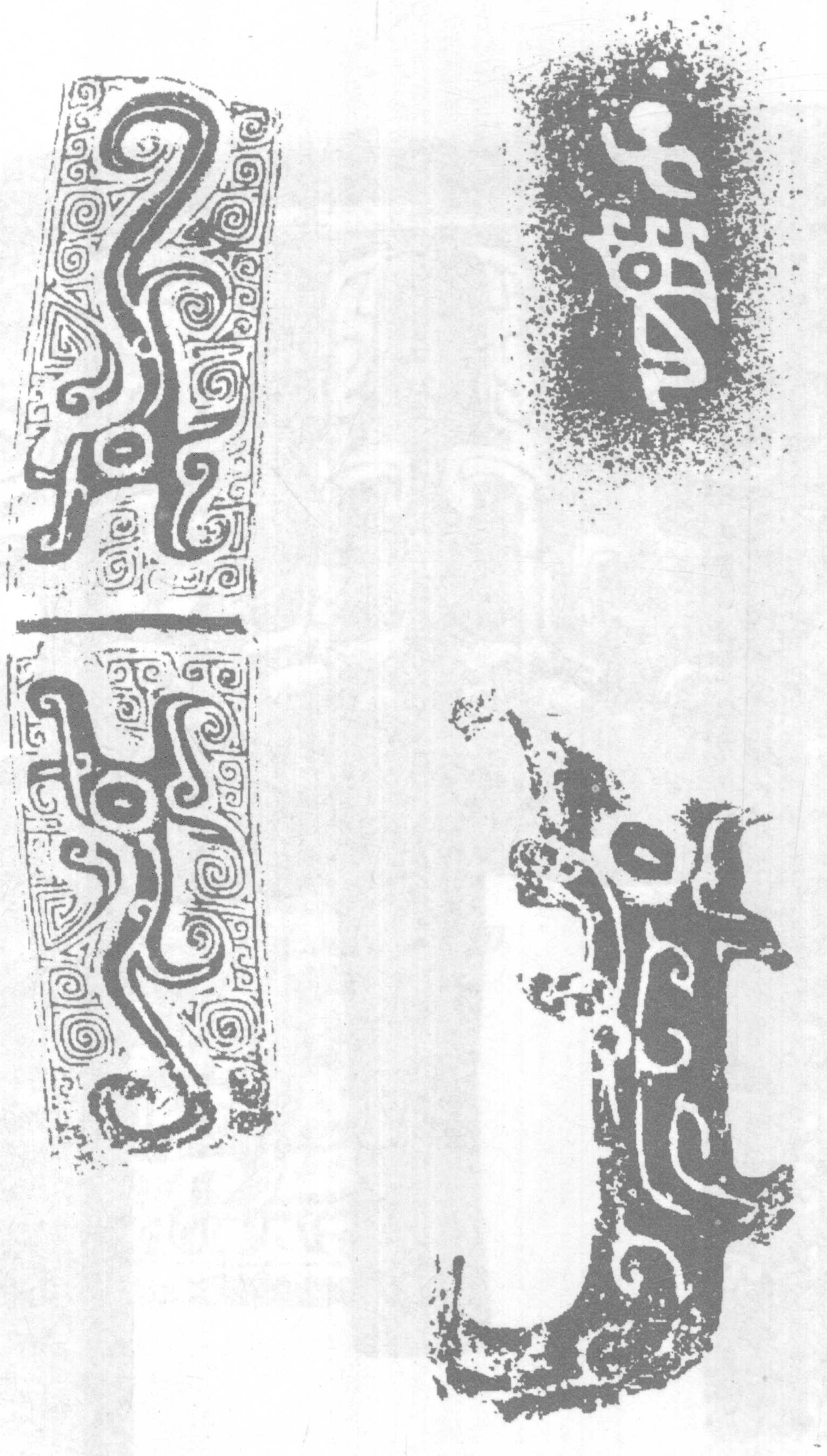
Ting, Höhe bis zum Gefässrand 132 mm.

Aussen unregelmässige grüne Patina, an den freien Stellen dunkelstahlgraue Bronzefarbe mit bräunlichen Tönungen; innen leuchtend malachitfarbener Überzug mit blauen Stellen.

Inschrift: zwei Zeichen innen am Boden

Fundort vermutlich An-yang









VI, 1-3

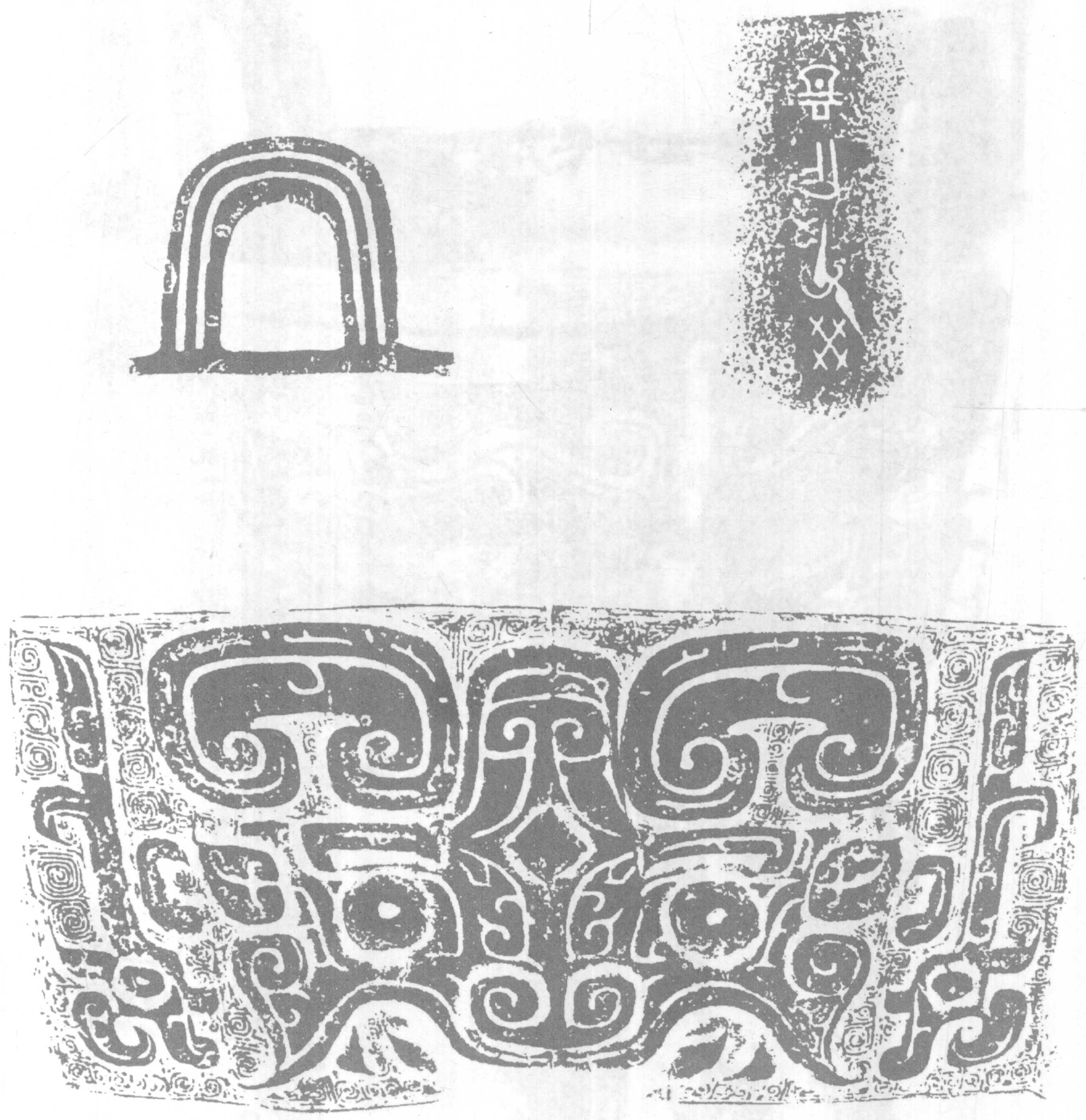
鼎

Ting, Höhe bis zum Gefässrand 184 mm.

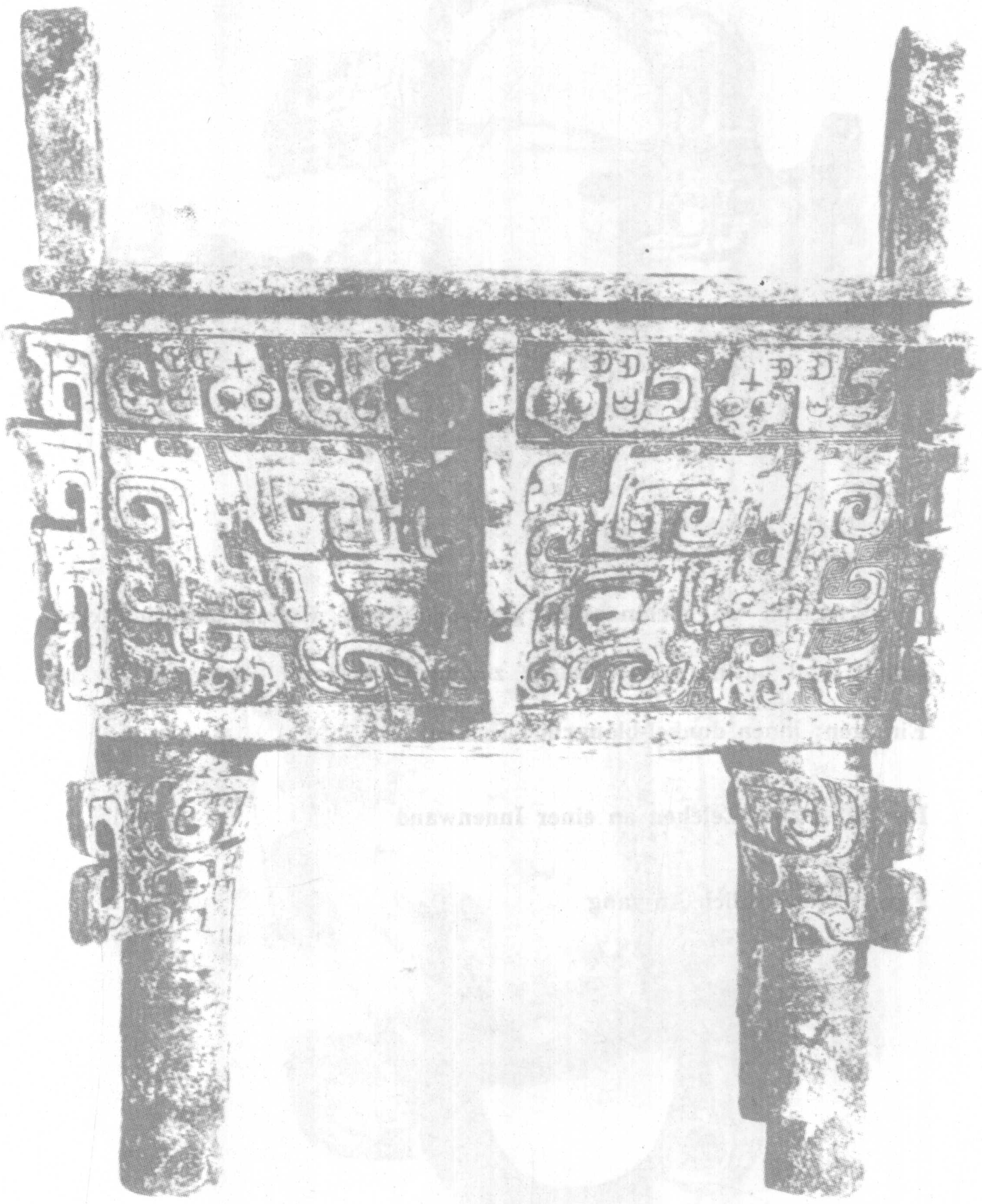
Aussen glatte, leuchtende, dunkel-blaugrüne Patina, heller an den erhabenen Sellen und mit blauen Flecken an den Füssen und an der Unterseite; innen dünne Inkrustation; in den Vertiefungen des Ornamentgrundes Reste schwarzer Pigmenteinlage.

Inschrift: ✕ 作 癸父

Angeblich Ausgrabung aus der Nähe von Lo-yang







VII, 1-3

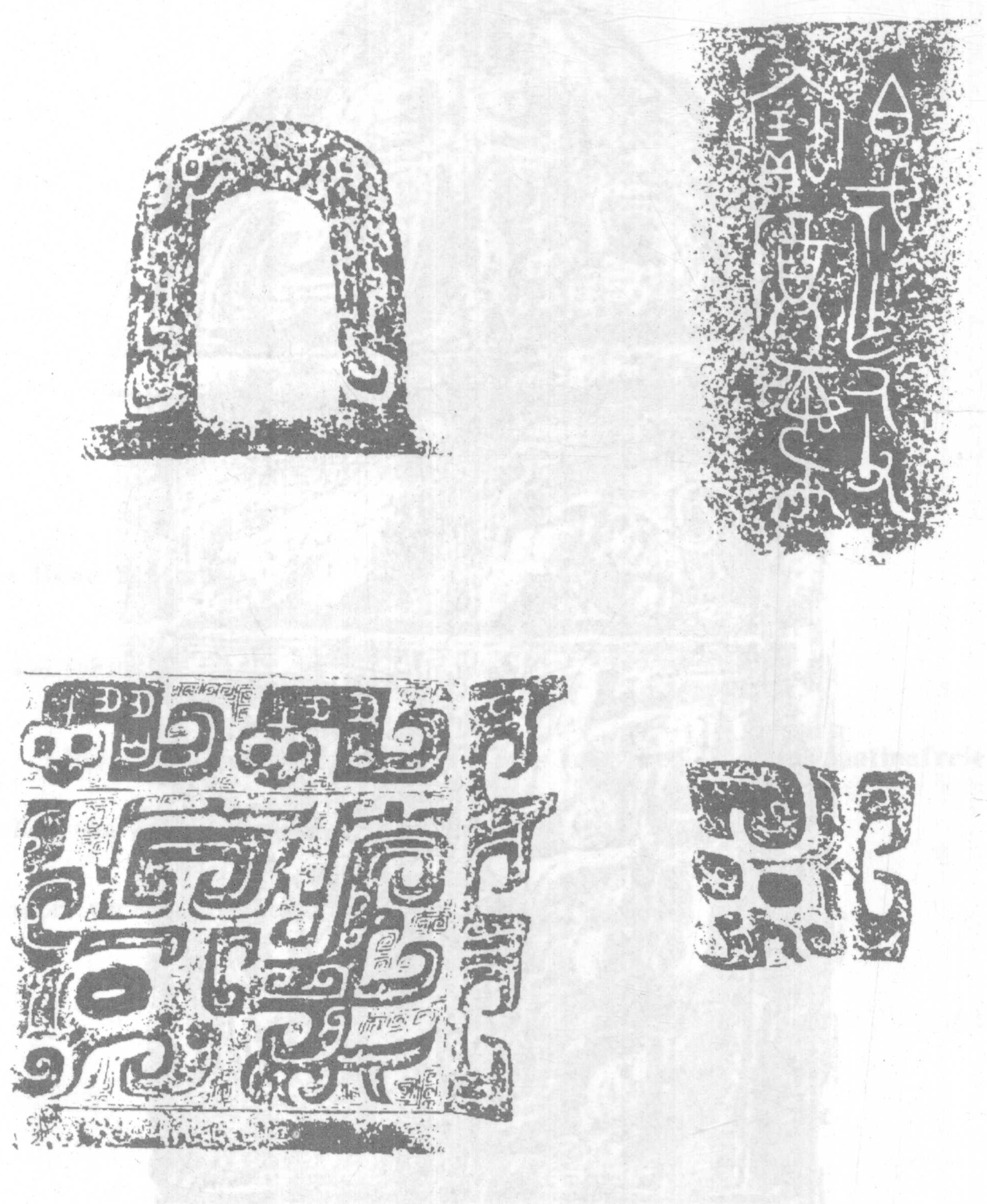
鼎

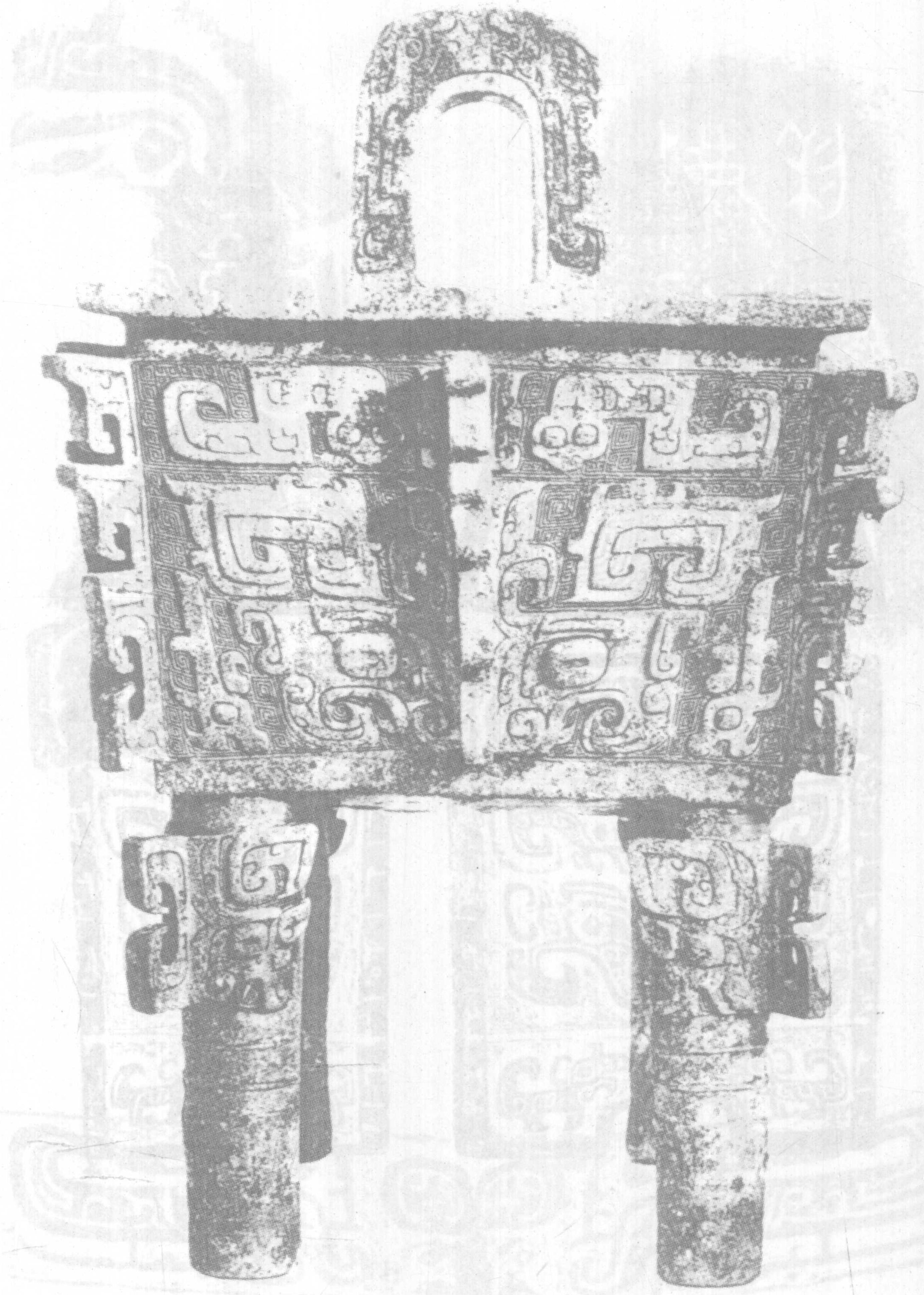
Ting, Höhe bis zum Gefässrand 211 mm.

Malachitgrüne Patina, dunkel-stahlgraue Bronzefarbe an dem erhabenen Dekor.

Inschrift: 白 戚 作 厥 父 寶 尊 彝

Fundort vermutlich Hsün-hsien







VIII, 1-3

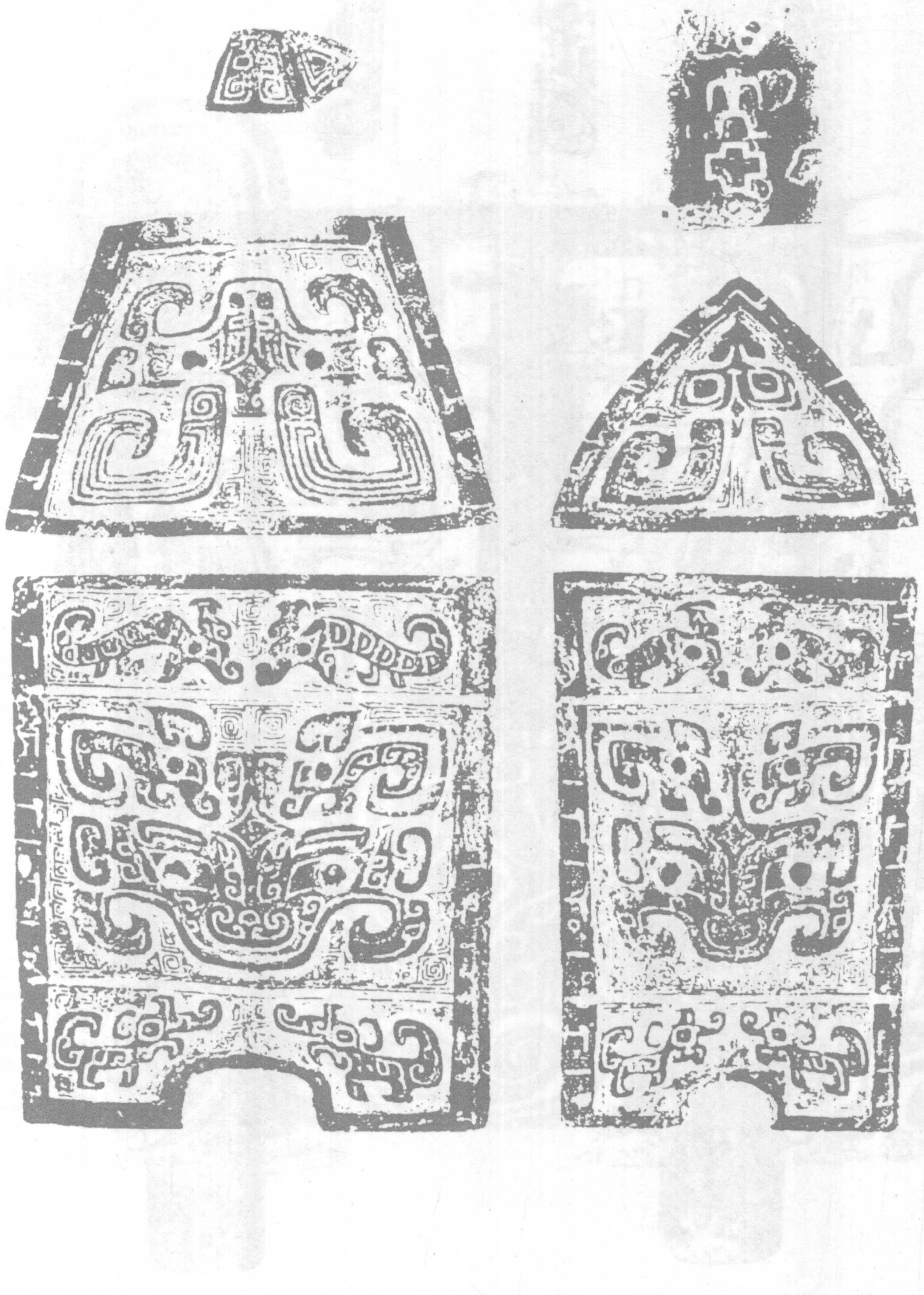
方　　彝

Fang I, ganze Höhe 191 mm.

Aussen ungleichmässige grau-blaugrüne Patina mit malachitgrünen und patinafreien Stellen; ziegelrot verfärbte Reste von Dekor-Einlagen; innen dunkel-blaugrüne Pusteln.

Inschrift: zwei Zeichen an einer Innenwand

Fundort vermutlich An-yang







IX, 1-2

簋

Kuei, Höhe 150 mm.

Aussen dünner Überzug von graugrüner Patina mit graublauen Flecken, innen ähnlich, jedoch stärker inkrustiert.

Am Innenboden netzartige Nähte in Abständen von etwa 15 mm.

Inschrift am Gefässboden: 利 作 寶 尊 叢 彝

X, 1-2

壺

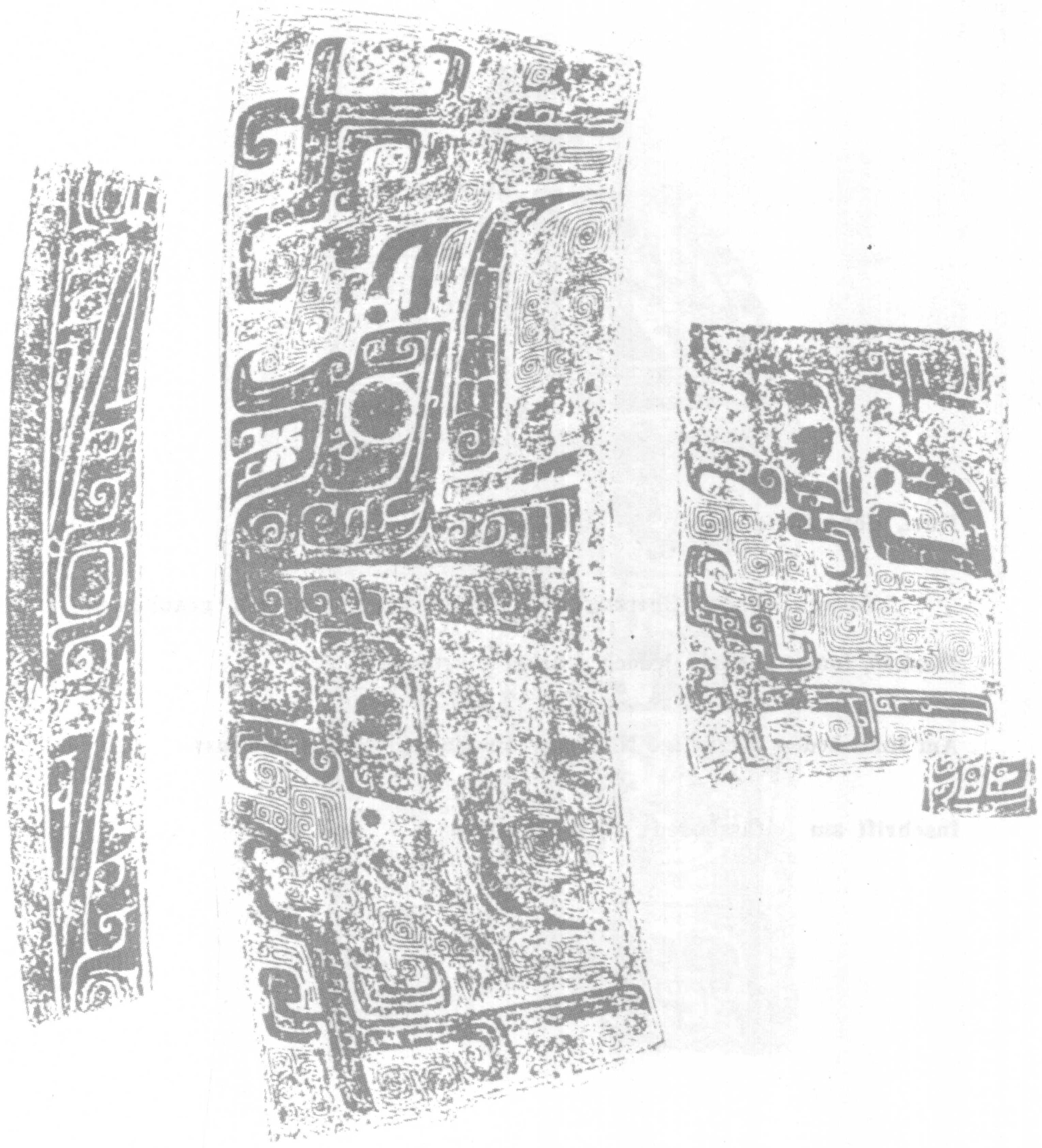
Hu, Höhe 331 mm.

Deckel fehlt.

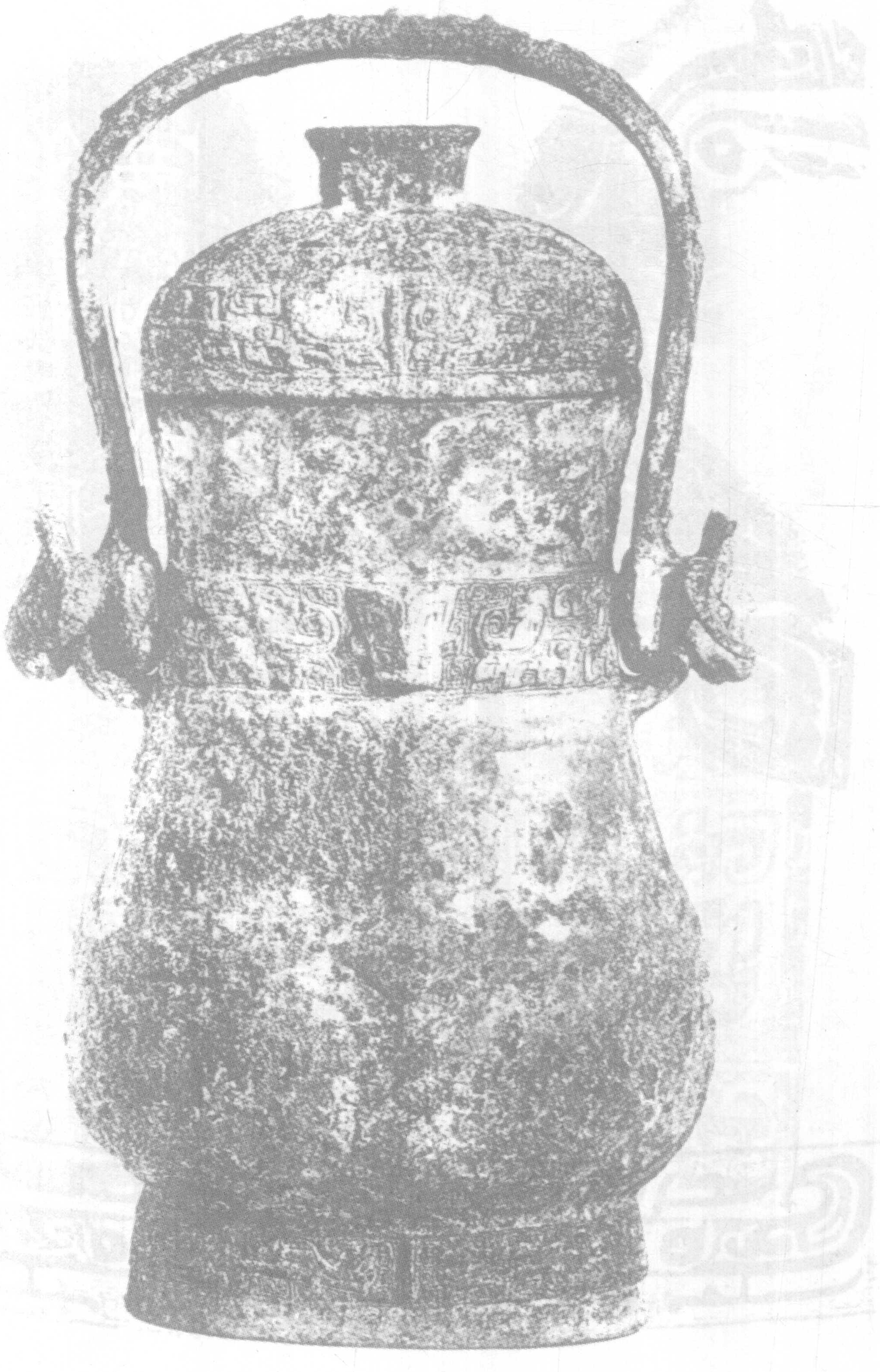
Patina dunkel-malachitfarben mit rostroten Flecken, patinafreie Stellen von graubräunlicher Tönung.

Fundort vermutlich An-yang









XI, 1-3

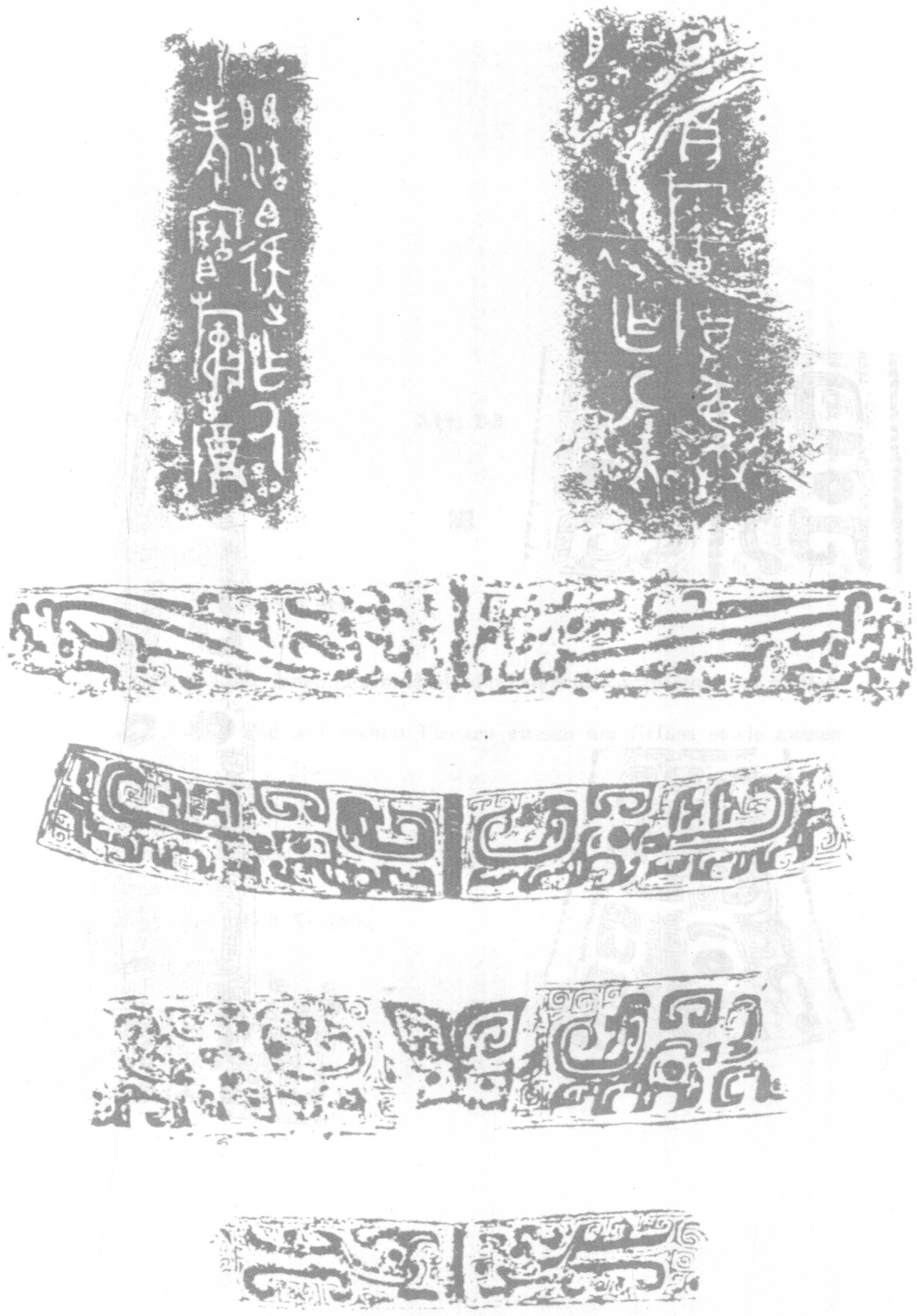
卣

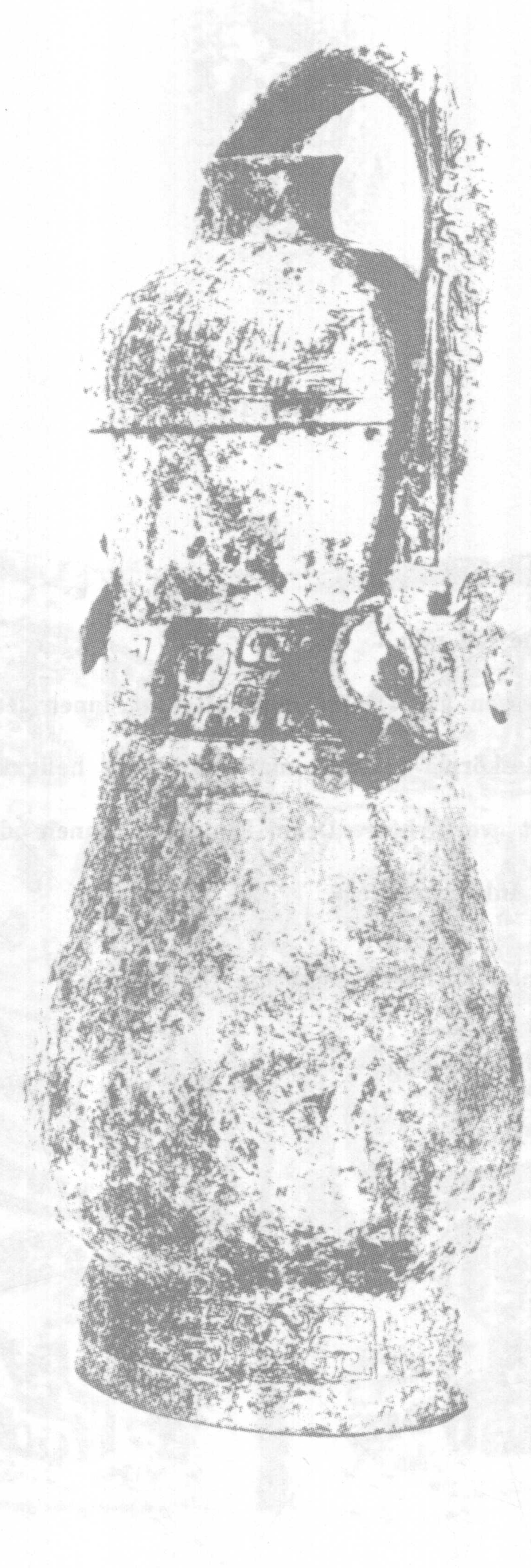
Yu, Höhe einschliesslich Henkel 302 mm.

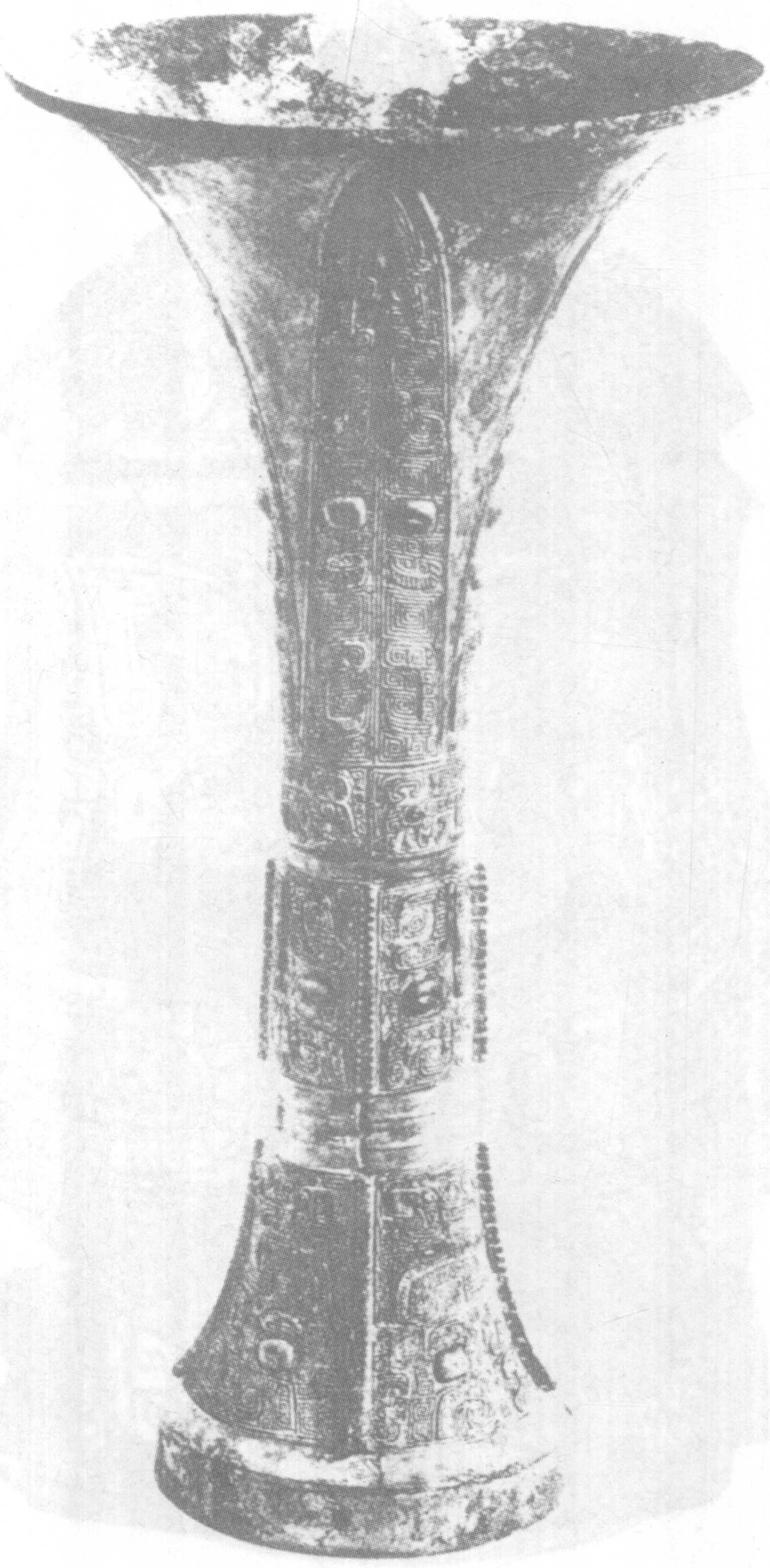
Malachitgrüne Patina mit dicken Pusteln; am Deckel patinafreie Stelle von graugelblicher Bronzefarbe, bleigraue patinafreie Stellen am Gefäss.

Inschriften, innen im Deckel: ×渚白逘作氏［厥］考寶旗［旅］隮［尊］, am Gefässboden dieselben Zeichen, z. T. in Spiegelschrift, dazu 㚔

Fundort vermutlich Hsün-hsien







XII, 1-2

觚

Ku, Höhe 293 mm.

Aussen grüngraue und perlgraue Lackpatina; Reste einer leuchtend dunkelgrünen, oberen Patinaschicht; innen grosse Stellen derselben leuchtend grünen Patina, darunter kleine rote Stellen; an der Innenwand des Fusses Gewebespuren.

Fundort vermutlich An-yang

XIII, 1-3

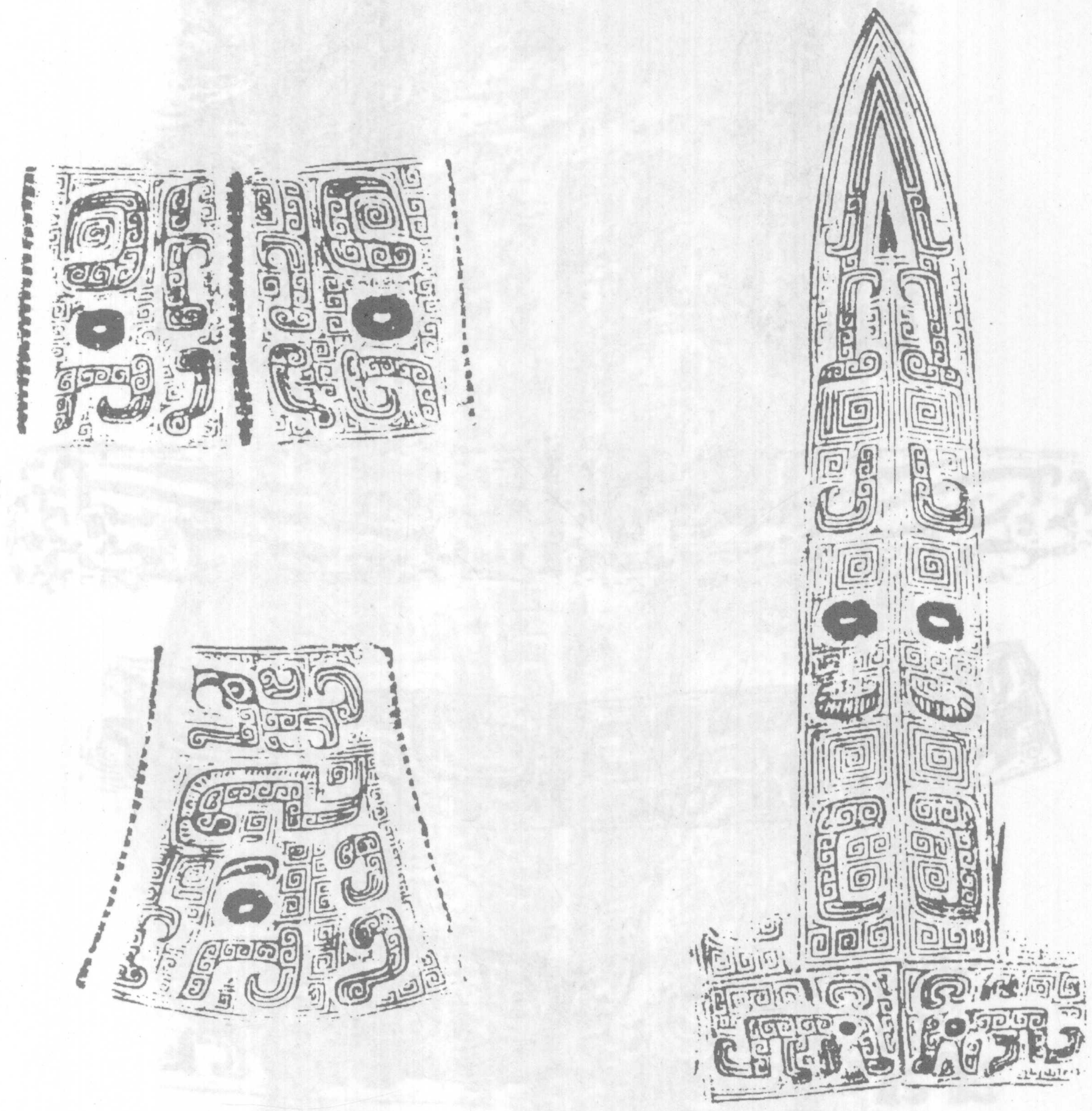
觶

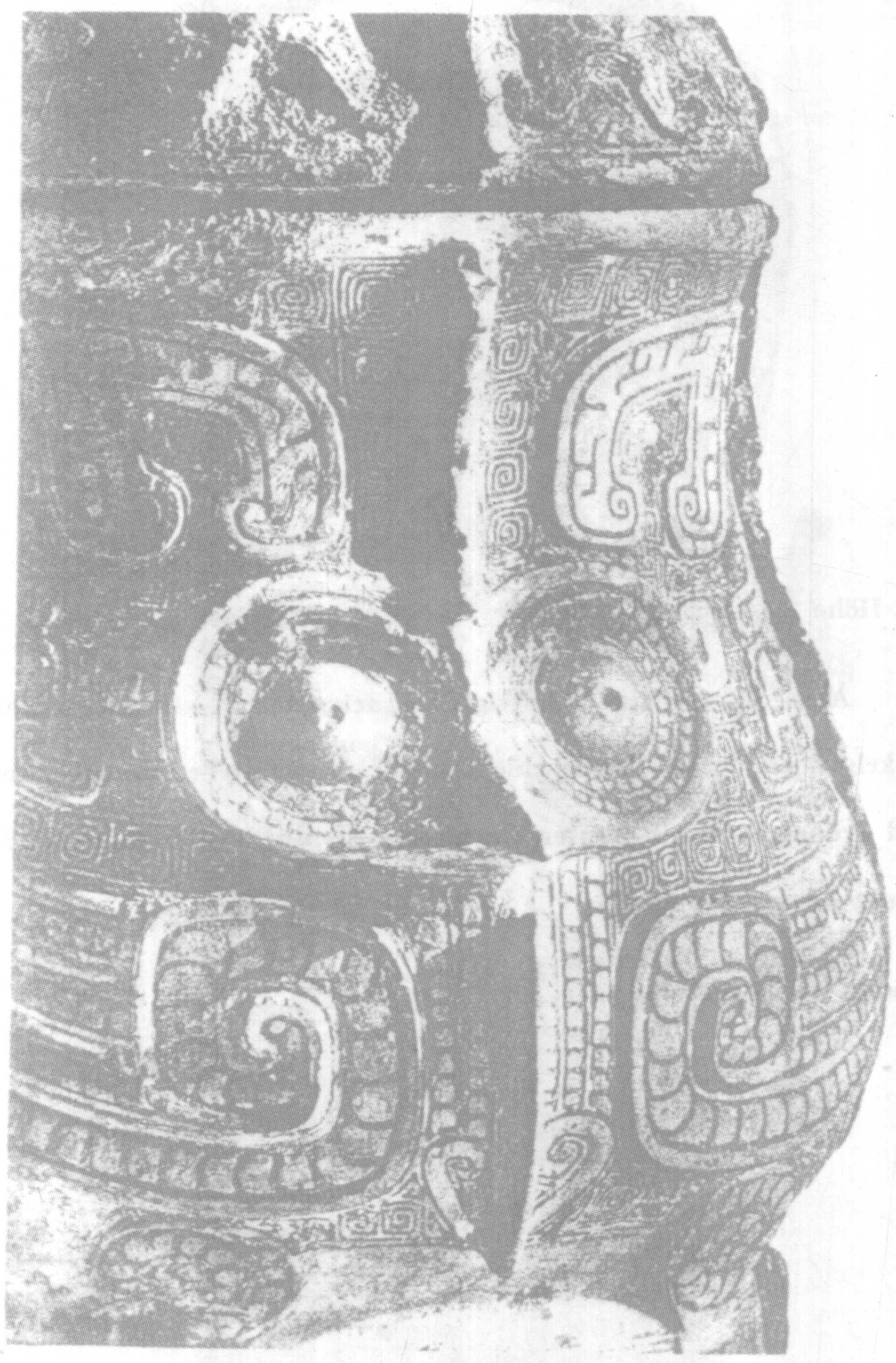
Chih, ganze Höhe 187 mm.

Patina aussen am Deckel malachitgrün, innen leuchtend dunkelgrün; am Gefässkörper aussen mattglänzende, hellgrüne Lackpatina, Reste dunkelrot verfärbter Dekor-Einlagen; innen dicke, leuchtend malachitfarbene Inkrustationen.

Inschrift: ein unleserliches Zeichen am Innenboden

Fundort vermutlich An-yang







XIV, 1-3

觶

Chih, ganze Höhe 193 mm.

Aussen und innen gleichmässig dunkelgrüne Lackpatina, mit glatten grauen Stellen und mit blauen Flecken aussen am Gefäss sowie aussen und innen am Deckel.

Inschrift im Deckel: 光(?)

Fundort vermutlich An-yang





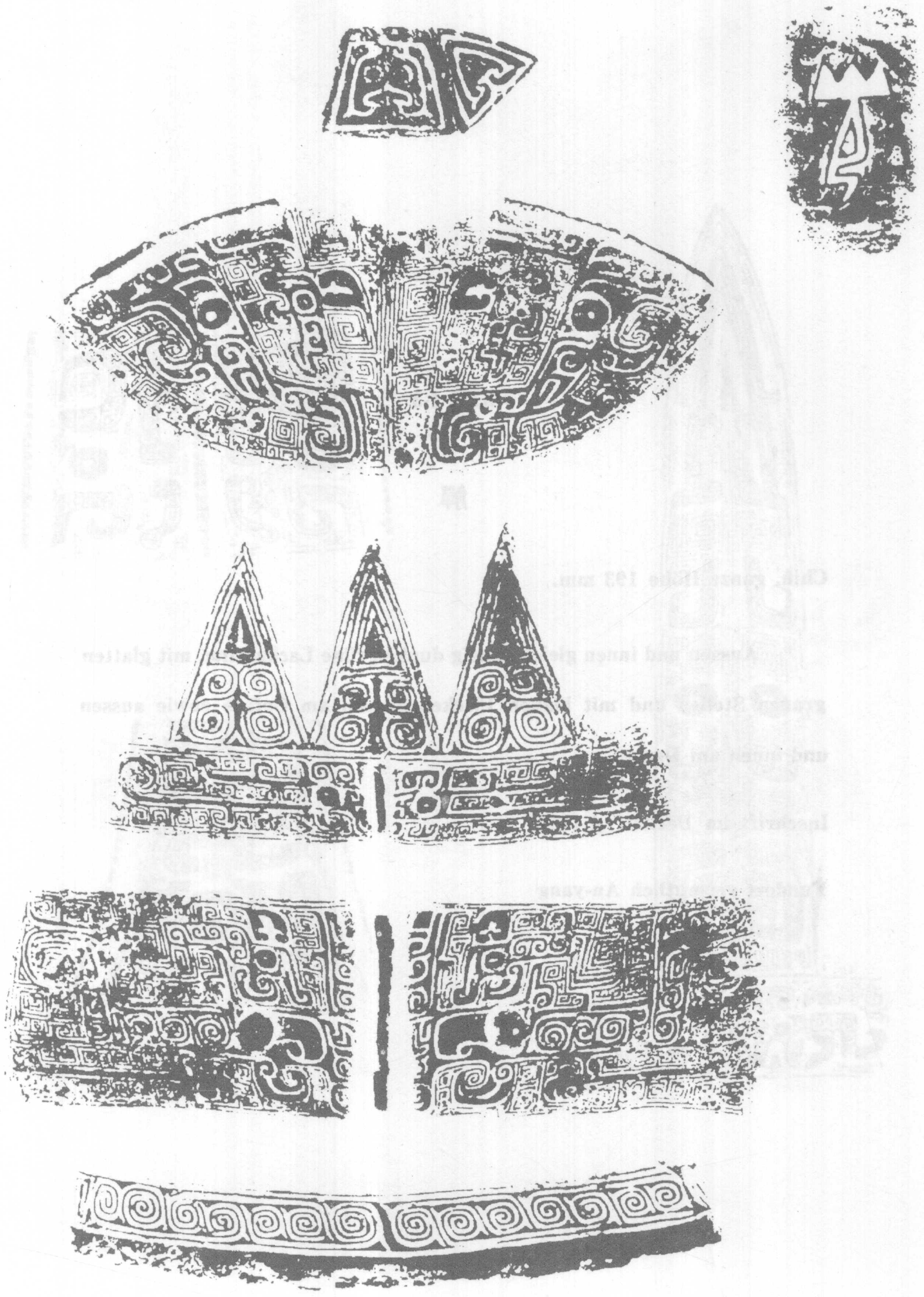


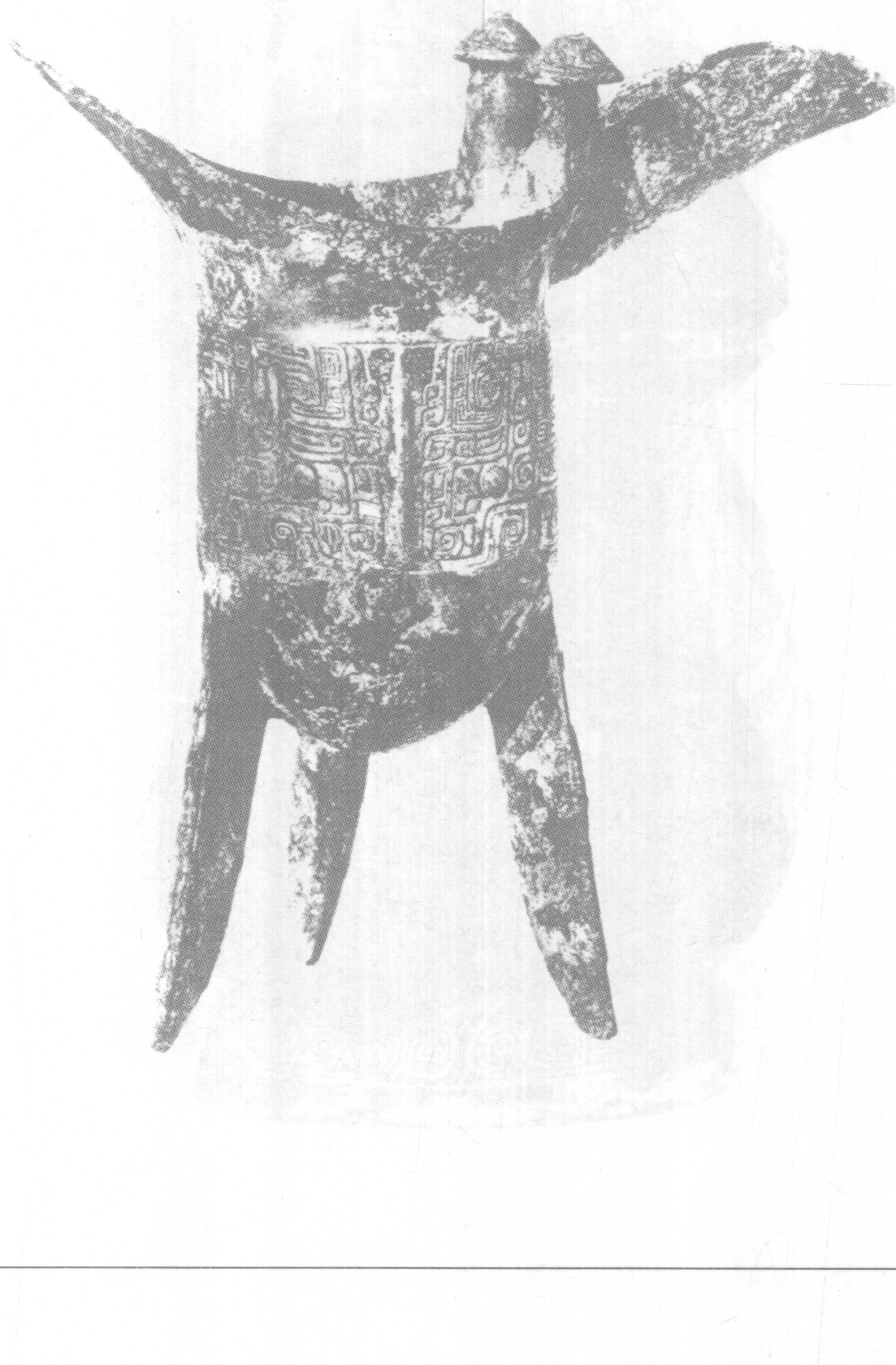
XV, 1-3

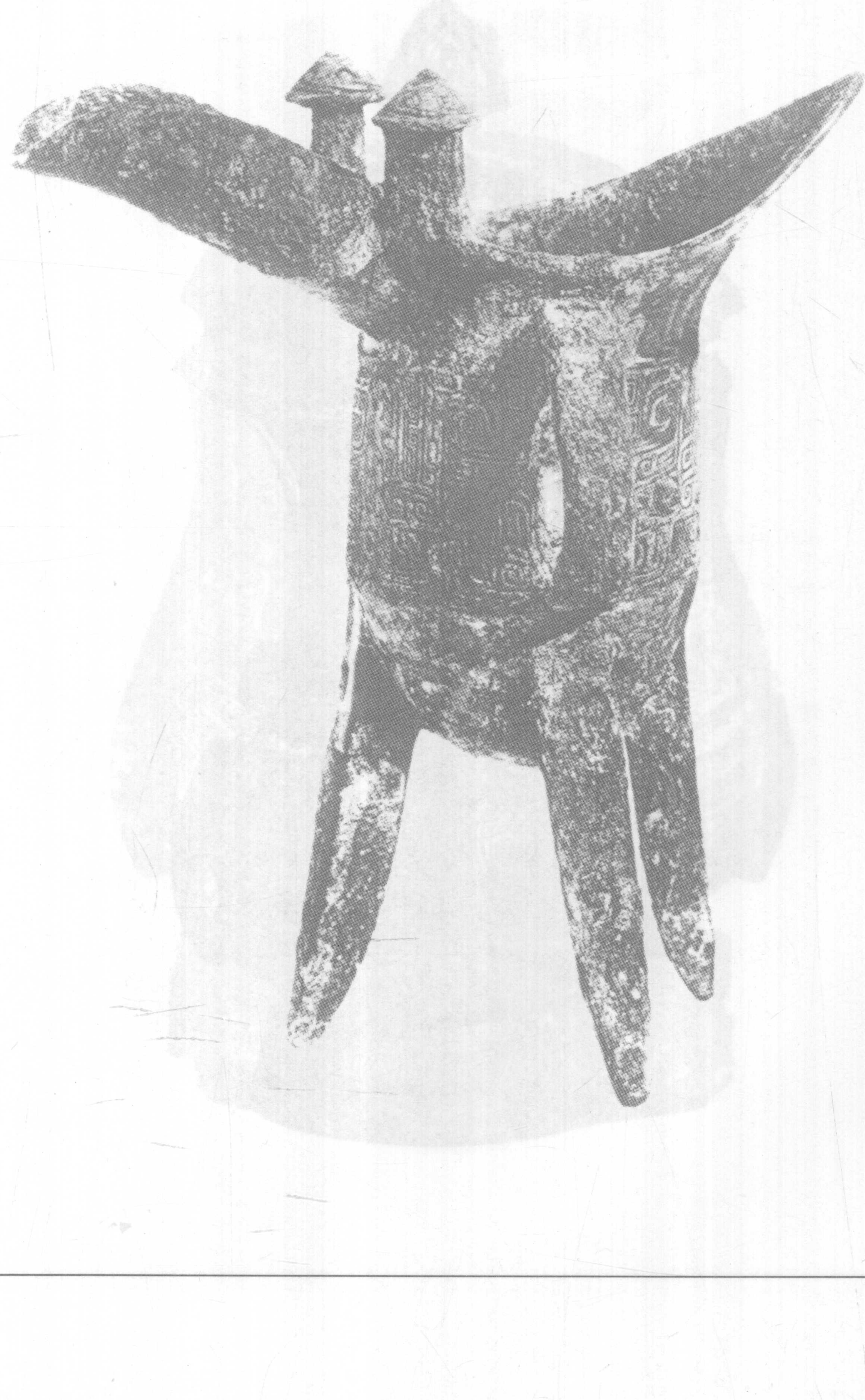
爵

Chüeh, Höhe bis zum oberen Rande des Knopfes 186 mm.

Bleigraue Patina; blaugrüne Pusteln am Henkel und an den Füssen; spärliche rostbraune Flecke.







XVI, 1-2

角

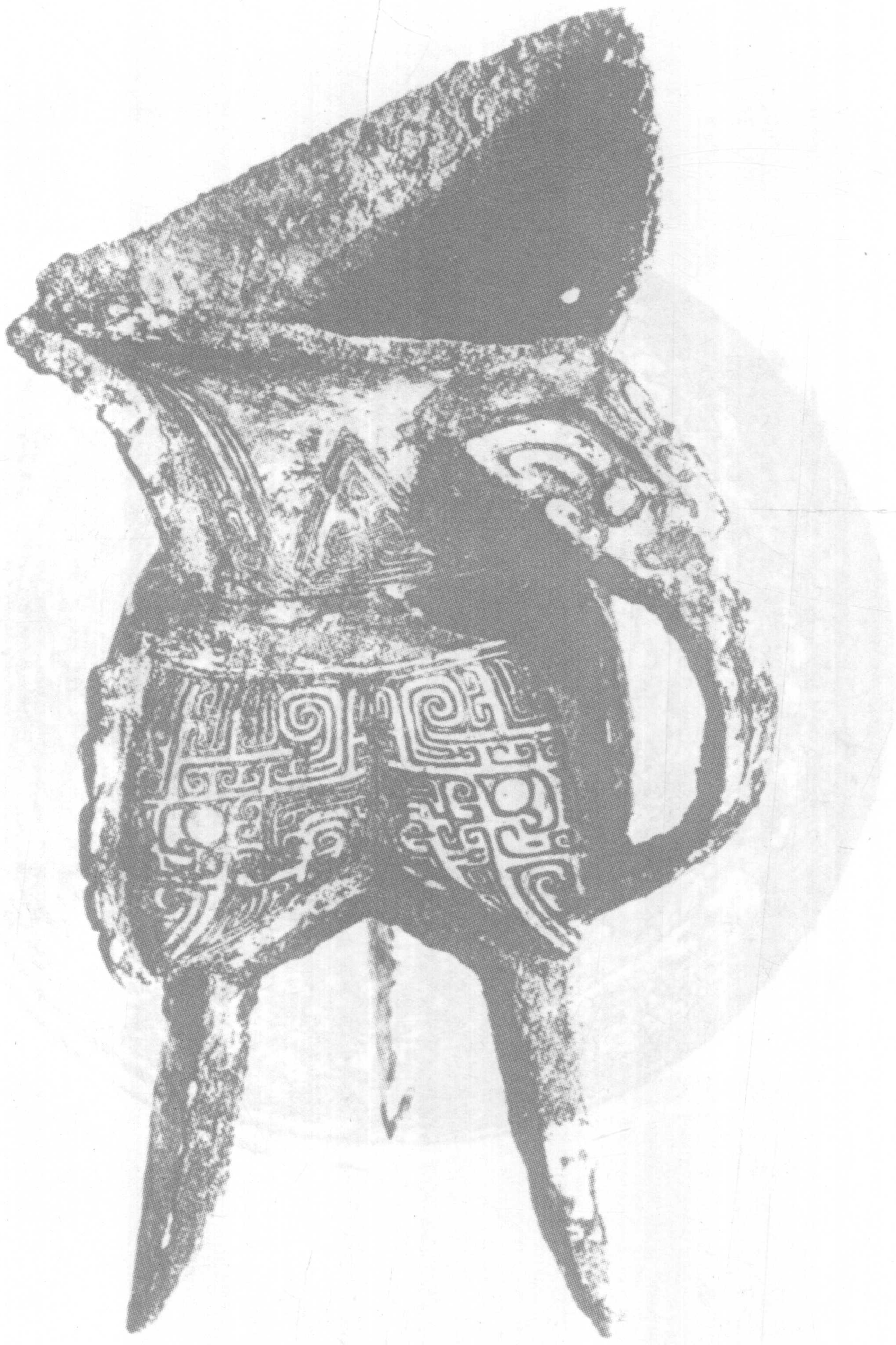
Chiao, ganze Höhe 202 mm.

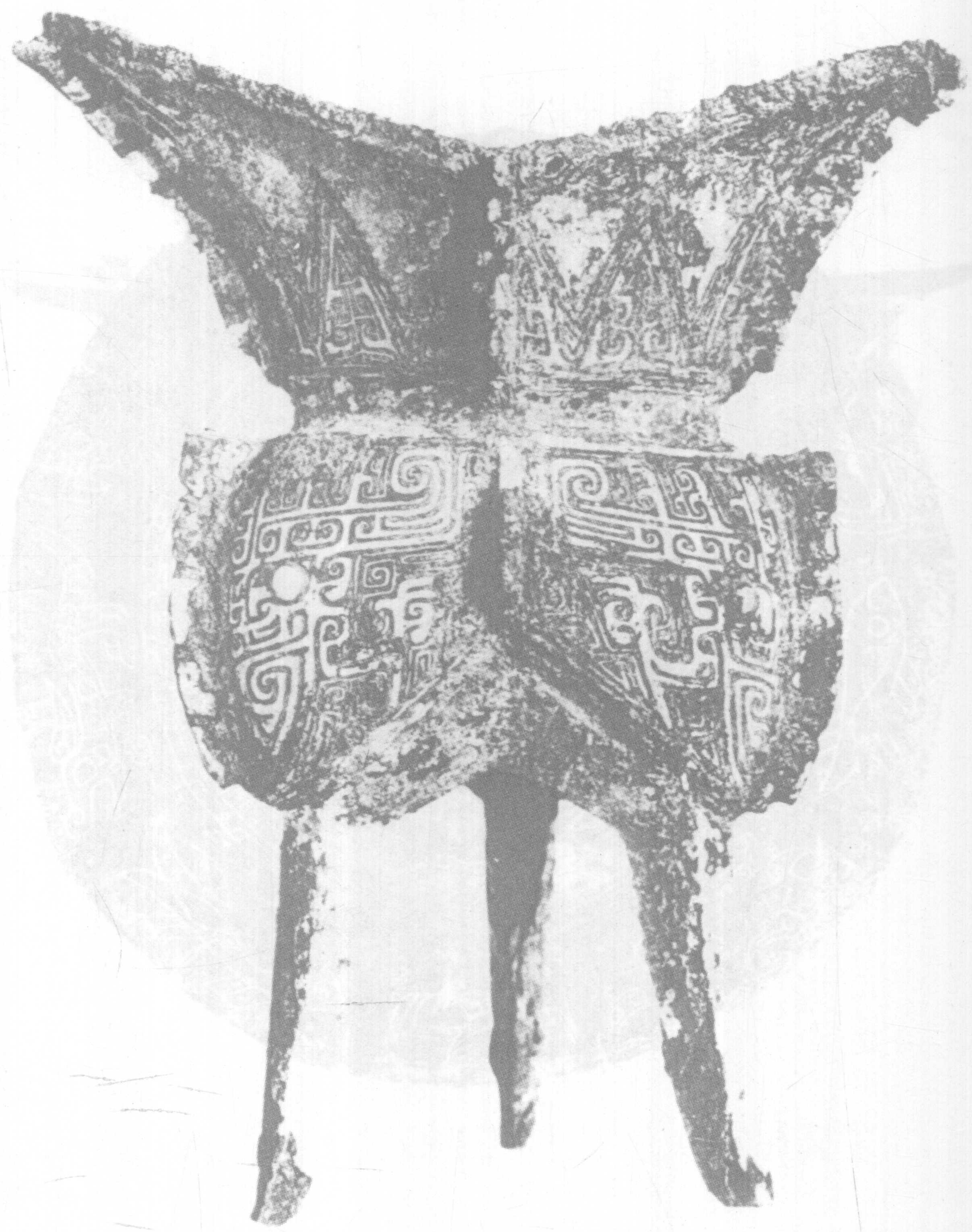
Deckel fehlt.

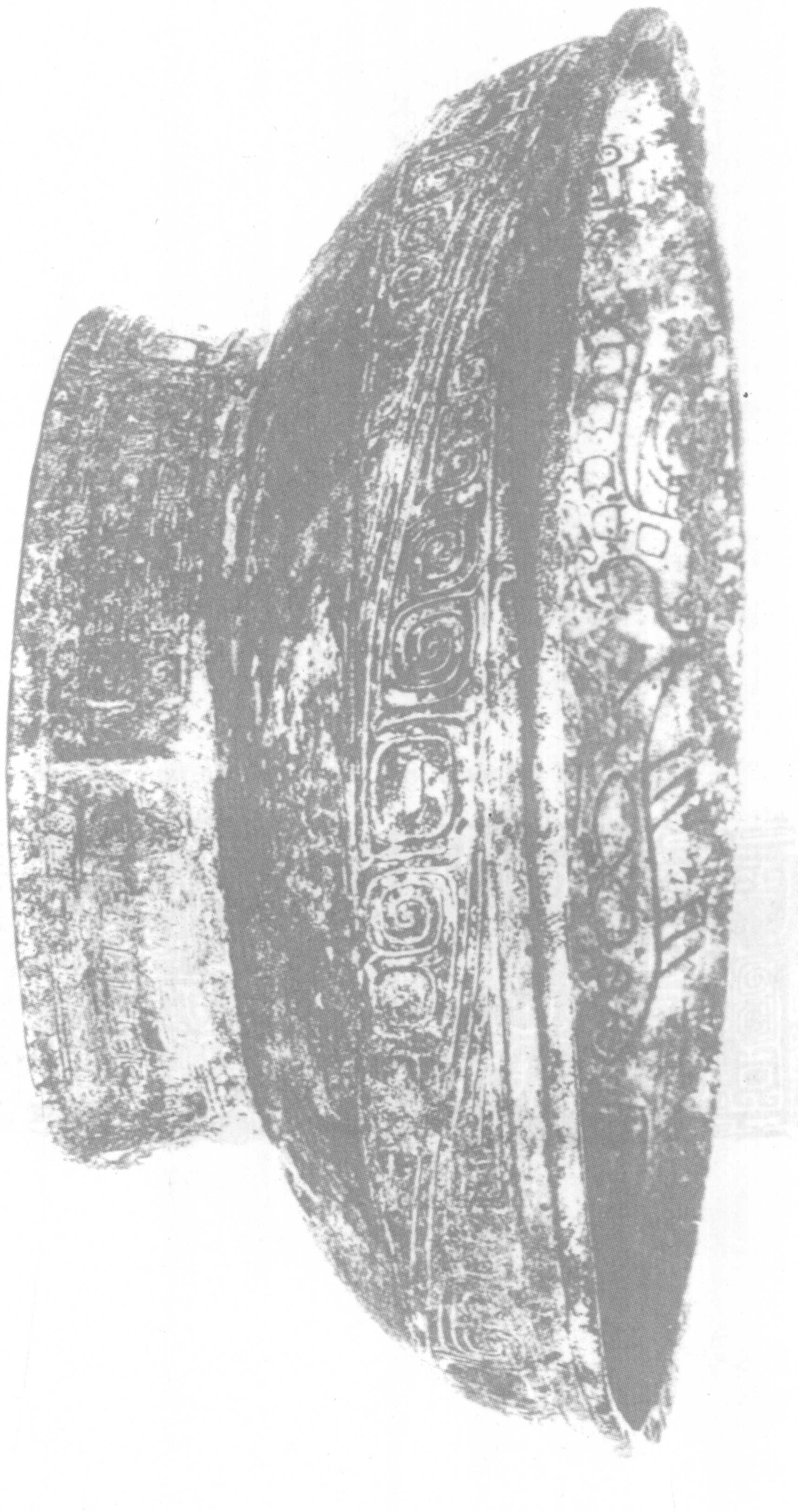
Aussen starke Inkrustationen, sonst matt-hellgrüne Lackpatina, darunter dunkel-ziegelrote Stellen; dunkel-ziegelrot verfärbte Dekor-Einlagen; innen dicke malachitfarbene Inkrustationen und Pusteln; stellenweise völlige Zersetzung.

Fundort vermutlich An-yang









XVII, 1-4

盤

P'an, Höhe 112 mm., Durchmesser am oberen Rand 289 mm.

Aussen leuchtend grüne Patina mit grösseren braunroten Stellen; feinmaschige Gewebereste; innen graugrünlicher Überzug mit bräunlichen Stellen am Kopf des Untiers.

Inschrift: das Zeichen 舟 neben dem linken Ohr des Untiers

Fundort vermutlich An-yang



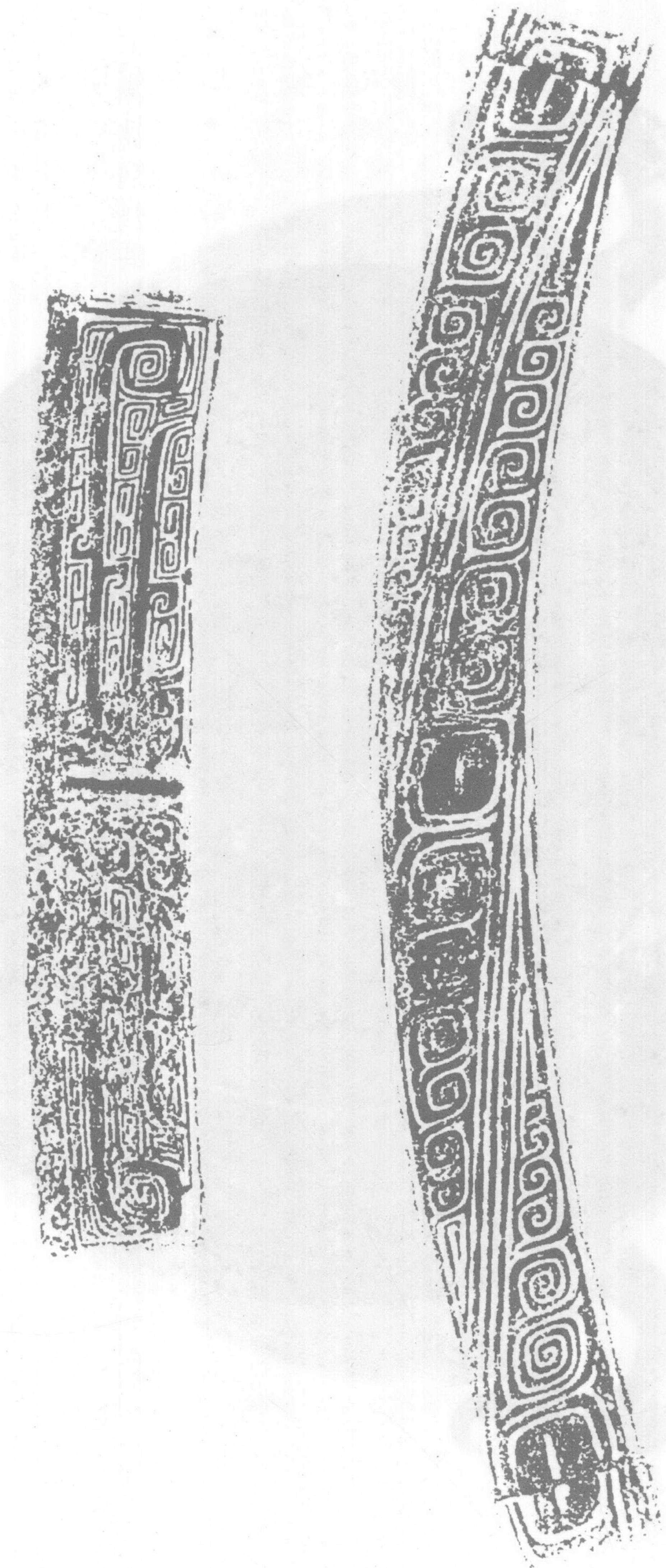


XVIII

簋

Kuei, Höhe 165 mm.

Graue und graugrüne Patina mit rostroten Stellen.



XIX, 1-3

鼎

Ting, Höhe bis zum oberen Rand der Tiere: 238 mm.

Dünner grüner Patina-Überzug auf schwärzlichem Grund.

Sogenannte "alte Ausgrabung"





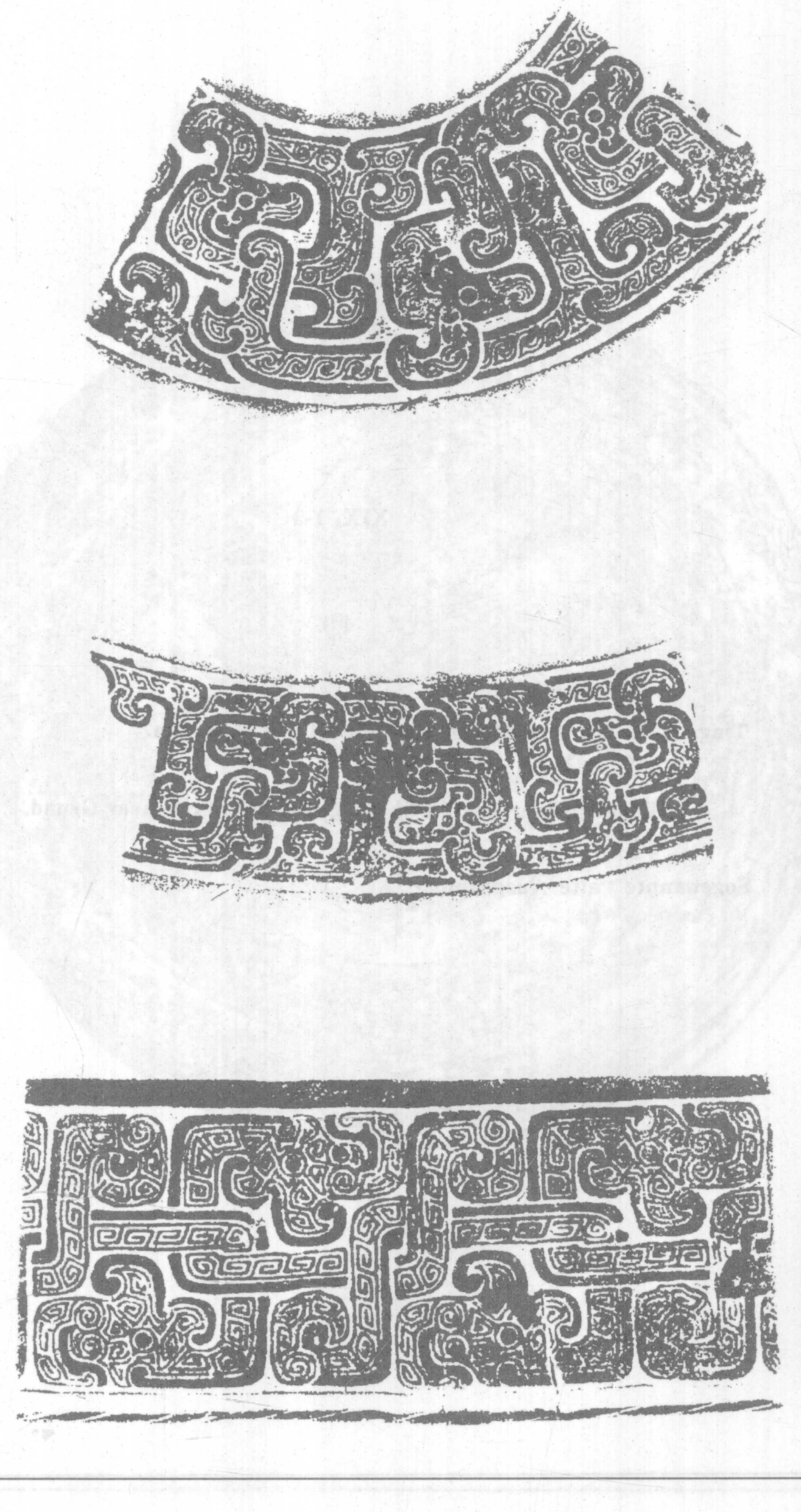


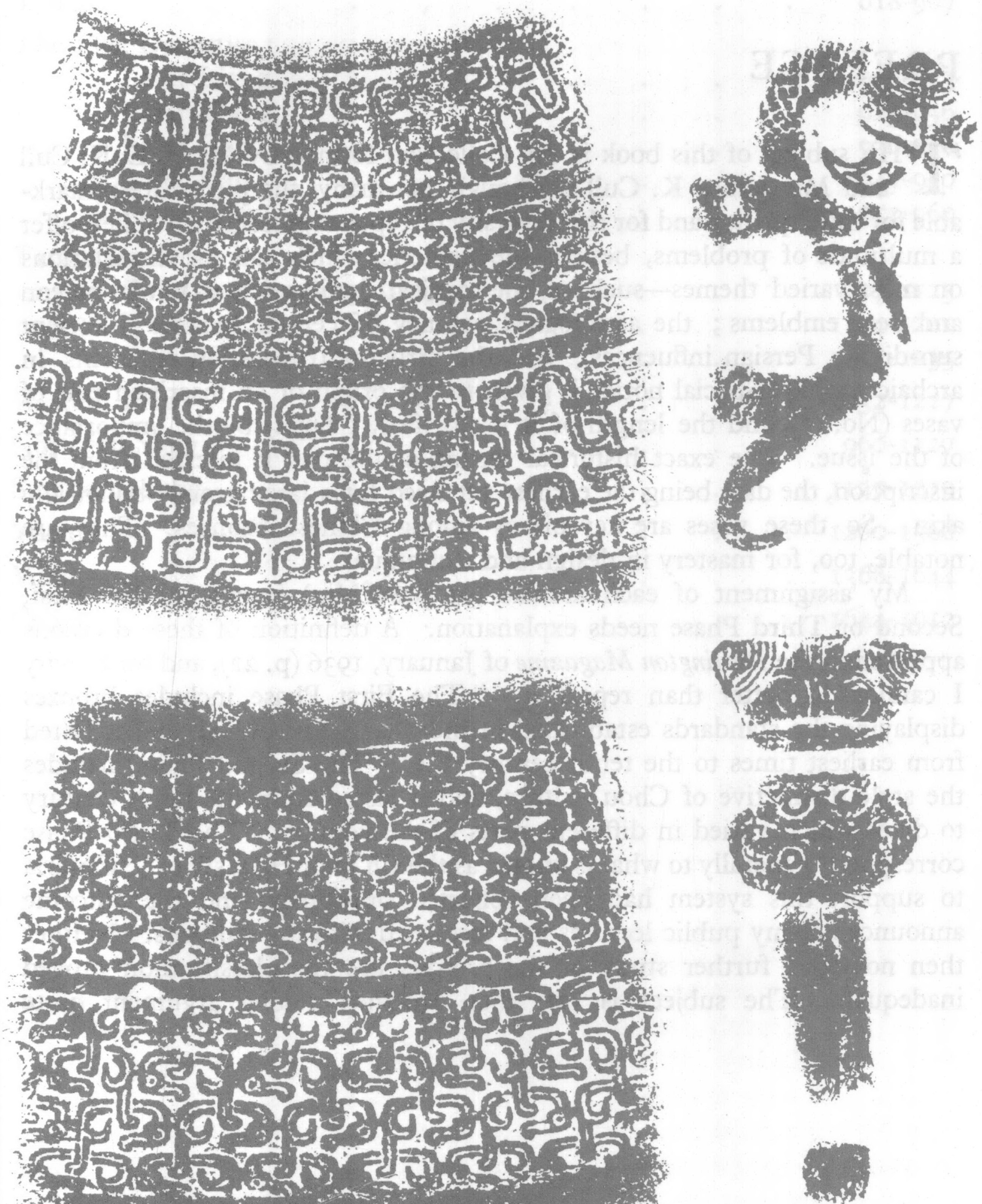
XX, 1-2

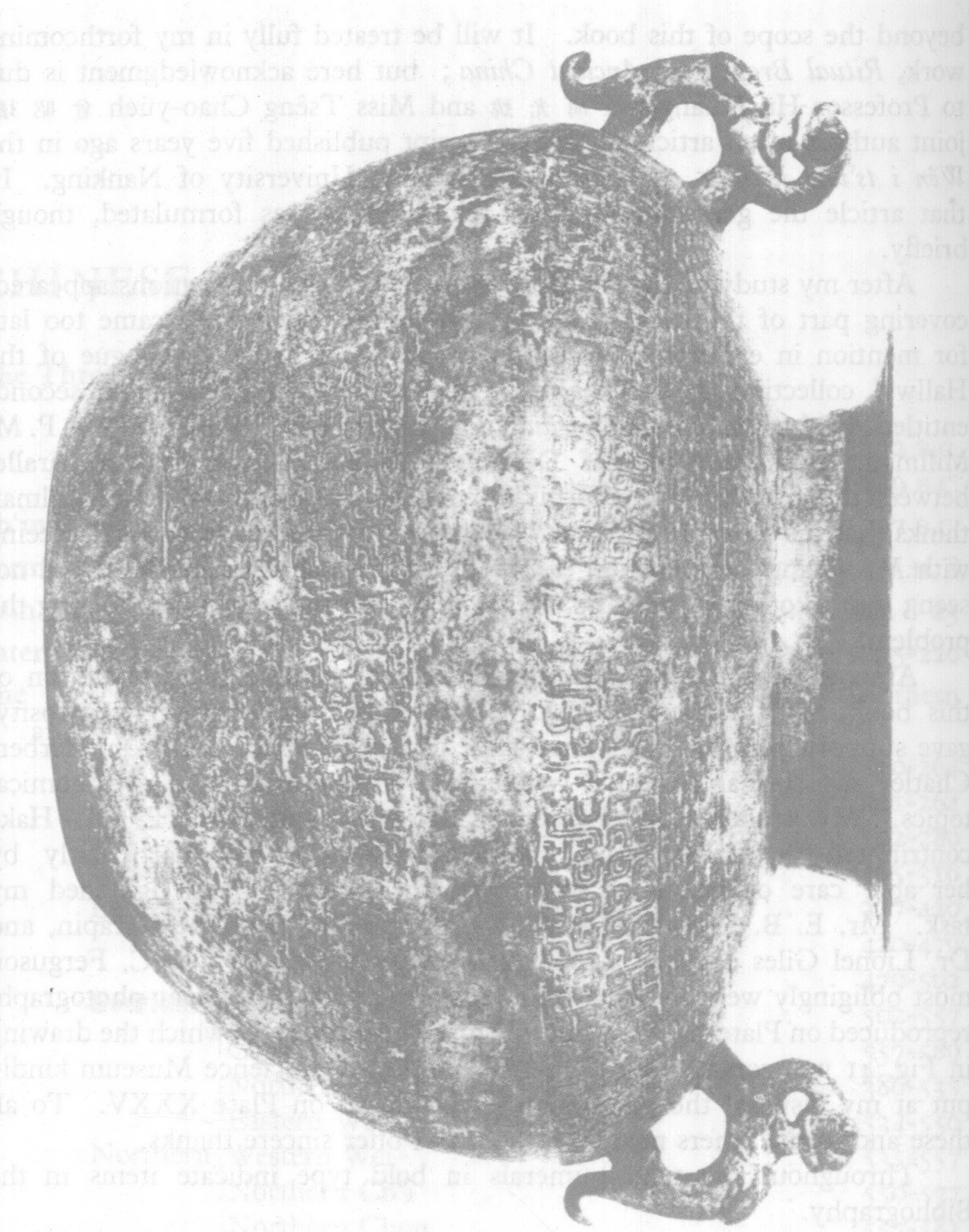
瓿

P'ou, Höhe 298 mm.

Gleichmässige graugrüne Patina mit hellblauen Flecken.







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The Cull Chinese Bronzes

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University of London
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M CM XXXIX
· 1939

PREFACE

THE subject of this book is the Collection formed by Mr. A. E. K. Cull and Mr. James K. Cull. Though not many, the pieces are remarkable for their quality and for the diversity of types represented. They offer a multitude of problems, besides the æsthetic, which call for dissertations on most varied themes—such as, the magical significance of hawk, pigeon and bear emblems; the astrological potency of certain mirrors; ancient sun-dials; Persian influences; and the structural evolution of forms in archaic script. Special notice is given to the origin of an inscribed pair of vases (No. 12), and the length of it is justified, I hope, by the importance of the issue. The exact historical setting of the pair is inferred from the inscription, the date being the earliest yet fixed for a large group stylistically akin. So these vases are key-pieces among Chinese bronzes. They are notable, too, for mastery in design and technique.

My assignment of each archaic (or pre-Ch'in) bronze to the First, Second or Third Phase needs explanation. A definition of these divisions appeared in the *Burlington Magazine* of January, 1936 (p. 22), and for brevity I cannot do better than repeat it. "The First Phase includes bronzes displaying the standards established in the Shang-Yin period, and it lasted from earliest times to the tenth century B.C. The Second Phase includes the style distinctive of Chou culture, and it lasted from the tenth century to dates which varied in different parts of the country. The Third Phase corresponds generally to what is known as the Ch'in or Huai style." Criteria to support this system had been collected previously, and the outcome announced at my public lectures and discussed with my students. Neither then nor after further study of the bronzes has the classification proved inadequate. The subject is one that demands a long argument quite

beyond the scope of this book. It will be treated fully in my forthcoming work, *Ritual Bronzes of Ancient China*; but here acknowledgment is due to Professor Hu Kuang-wei 胡光煒 and Miss Tsêng Chao-yüeh 曾昭燏, joint authors of an article on archaic script published five years ago in the *Wên i ts'ung k'an* 文藝叢刊 of the Central University of Nanking. In that article the germ of the three-fold division was formulated, though briefly.

After my study of No. 28 had been finished, two publications appeared, covering part of the same ground; but unfortunately they came too late for mention in either text or Bibliography. The first, a catalogue of the Hallwyl collection in Stockholm, is by Mr. O. Karlbeck; the second, entitled *An Ancient Chinese Sun-dial*, is by Bishop W. C. White and Mr. P. M. Millman. Both take note of Dr. Liu Fu's article and draw a parallel between the so-called **T L V** forms and the sun-dial markings. Mr. Millman thinks that the movable gnomon was used to cast the shadow, thus agreeing with Mr. T'ang's explanation (*v. inf.* p. 152), which apparently he had not seen; but in other respects he offers some fresh suggestions for solving the problem.

Among those to whom I am indebted for help in the preparation of this book, my old friend Mr L. C. Hopkins, with unfailing generosity, gave support from his great knowledge of archaic script. To Dr. Herbert Chatley my special gratitude is due for valuable advice on astronomical topics. My students Miss Tsêng Chao-yüeh and Miss E. M. Hake contributed in various ways. Miss K. Bradley, too, particularly by her able care of detail in secretarial work, substantially lightened my task. Mr. E. B. Howell informed me on the habits of the terrapin, and Dr. Lionel Giles checked a topographical quotation. Dr. J. C. Ferguson most obligingly went to some trouble to procure the excellent photograph, reproduced on Plate XXXIV, and the inked-squeeze from which the drawing in Fig. 41 was copied. Dr. F. A. B. Ward of the Science Museum kindly put at my disposal the photographs reproduced on Plate XXXV. To all these and to the others named in the text I offer sincere thanks.

Throughout the text, numerals in bold type indicate items in the Bibliography.

W. P. Y.

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CHINESE DYNASTIC PERIODS

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Hsin		A.D. 8-23
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Ch'ing		1644-1912

NUMBER ONE A rectangular *ting* 方鼎, uninscribed
First Phase Height, 10⅝ inches (27 cm.) Plate I

THIS piece exemplifies an early type of the most numerous and diverse class of ritual vessels—the *ting*, which were used for cooking sacrificial food. Thick vertical flanges, projecting from the body and from the upper part of each cylindrical leg, mark the lines along which sections of the mould joined. The sides of the flanges are grooved horizontally, and there is a vertical groove at the proximal end of each alternate horizontal groove. Had these grooves on either side of each flange been deeper and exactly level, they would have joined to produce alternate T-shaped and horizontal perforations cutting the flange into a series of squared hooks, a condition that seems to have been a later development of the First Phase.

The decoration comprises animal forms in slightly modelled relief upon a ground of squared spirals. It affords a good opportunity for studying various manifestations of favourite motif generally called the "*k'uei* dragon" 夔龍, following the lead given by Sung cataloguers. This name embraces several creatures with different minor characteristics, though nearly all display a large head with prominent eye, a crest or horn, a single leg and a serpentine tail. The fact that the dragon generally appears with a single leg results from the habit of profile representation; two legs are visible in those rare instances when it is modelled in the round or otherwise shown not in profile (*v.* Fig. 10). A four-legged dragon was also part of the bronze-casters' fund of design, though of course only two legs appear in the profile view.

At the top on each side of this vessel's body is a confronted pair of the kind which has a hooked snout. On the two long sides the pair is separated by a mask which is composed of a pair of different *k'uei* dragons, the kind

with flask-shaped horns and open jaws. The latter combination manifests the last stage in the transformation that subserves the presentment of a frontal mask, for only the heads of the two dragons remain, seen in profile. A series of examples might be collected to demonstrate the gradual dwindling of the dragon's hinder parts until only the heads are left. The first stage, while the dragons are still intact, is exemplified by the large pairs on this *ting*, and they belong to yet another species, one with open jaws and curved horns. Observe how these dragons bring their profile heads together to produce frontal masks, the only extraneous elements in each instance being the dividing flange and above the opposed snouts a median form which is difficult to explain. Thus, side by side, convenient for comparison, are terminal manifestations of a motif which appears on the bronzes in countless intermediate forms. Its diversity is not occasioned solely by differences in the species of the contributory dragons, nor by the varying degrees of their stylization and disintegration. Other animal forms sometimes take a share in the frontal mask which is almost ubiquitous on First Phase bronzes and is generally called the *t'ao-t'ieh* 饕餮 or "glutton." This queer explanatory term and the implication that the mask served as a warning against greed go back at least as far as the third century B.C. (*v.* 88, XVI 3). But is it likely that by then the intentions of designers more than a thousand years before were still remembered? A mere rationalization echoing the spirit of the time seems more probable.

Turning again to the large mask on this *ting*, we find exemplified the frequently composite, hybrid nature of the device. On each of the horns may be traced a suggestion of yet another *k'uei* dragon, the one with a pointed, leaf-shaped ear or horn which may be called the "pointed feline type" in contradistinction to the "rounded feline type" described later (p. 4). This pointed feline type appears again in a pair of confronted dragons on each of the legs, each pair forming a so-called *t'ao-t'ieh* mask. Some presentments of the *k'uei* dragon have an undisguised smaller dragon taking the place of each horn. Furthermore, compare the large dragons' tails on the *ting* with the bird forms in Fig. 9. The slight resemblance between them would gain significance if a number of intermediate variants were collected to bridge the gap; and such variants are to be found. Finally, note the external aspects of the upstanding handles which have

a linear, intaglio device based on the motif of confronted dragons, much stylized.

Evidence as to the date of this type is afforded by certain large *ting* which came to light during the excavations of "royal tombs" carried out since 1934 by the Academia Sinica near the site of the Shang-Yin capital at An-yang 安陽. They resemble it in general shape, and two *ting* from the late Manchu imperial collection at Jehol may likewise be cited as parallels. The latter bear inscriptions which are consistent with a Shang-Yin attribution (55, 1-5). Other examples of the type also are inscribed in the most archaic manner, and the conclusion is that No. 1 may be assigned to the Shang-Yin period or possibly to the beginning of the Chou.

NUMBER TWO A *ting* 鼎, inscribed First Phase Height, 6⅞ inches (17·5 cm.) Plate II

NUMEROUS examples of this type are known, alike in general form and differing but slightly in decorative detail. A normal three-legged *ting* has a cavity which is almost hemispherical; here the bottom of the cavity divides into three shallow depressions, each deepest at a point just above one of the cylindrical legs. There is another class of the ritual cooking vessels, the *li* 鬲, and it has the tripartite arrangement further developed, so that the cavity extends into hollow, conical legs. Since the type under discussion shares to some extent the features of both classes, it is appropriately called *li-ting*, the portmanteau term proposed by Karlgren (60, 91). It is, however, more a *ting* than a *li*, and hence the custom has been to classify it under the former heading.

The decoration consists of two devices repeated in low relief upon a ground of spirals. Of these two, the larger is a so-called *t'ao-t'ieh* mask, which appears on the body above each leg. It is composed of two *k'uei*

dragons of a kind previously mentioned. Though all but their heads have disappeared, the fact that two abbreviated dragons really are the contributory elements may be demonstrated by comparison with examples in which the hinder parts are still retained; for instance, see No. 3 and especially Plates IV and V. The distinctive feature of this kind of dragon is the presence of prominent C-shaped forms above the head. Whether they should be recognized as horns or ears is a problem. In many instances they are not accompanied with any other forms which might be taken to represent ears, and they do apparently serve as ears when tigers are the motif (*v.* Fig. 13 and Pls. XIV and XVII). On the other hand, there are examples which have diminutive ears in addition; but incongruities often occur in the archaic designs. I propose to take these C-shaped forms to be ears, and to call them the "rounded feline type."

The other decorative motif on this *ting* is the *k'uei* dragon with open jaws and curved horn or crest, such as we have noticed composing the large mask on No. 1. It is repeated six times, once on either side of each mask.

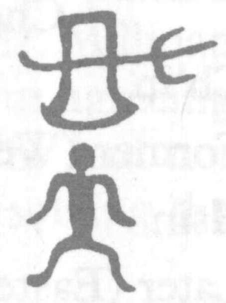


FIG. 1 Inscription on No. 2

The inscription, Fig. 1, is cut deeply in the interior of the vessel's side. Evidently it portrays an axe descending upon the head of a human figure. Such a pictogram is not rare, and sometimes it is combined with a name, presumably that of the ancestor to whom the vessel was dedicated. When the figure is headless, as it generally is, the act of decapitation is probably represented (*v.* 85, II 4, 19). In view of discoveries recently made when the "royal tombs" were excavated by the Academia Sinica close to the site of the Shang-Yin capital at An-yang, there can be little doubt that human sacrifice was practised as part of the funeral rites. Groups of headless skeletons were found buried beside the tombs, and nearby skulls neatly arranged in pits. Some of the cervical vertebræ had been severed in a manner which points to death by beheading. Whether this inscription actually portrays sacrifice thus performed is a debatable question. Perhaps it symbolizes prowess in war on the part of the first owner or of his ancestor; or perhaps it is an emblem adopted by a clan or family. The fact that it is engraved, not cast with the vessel according to usual procedure, does not necessarily mean that it was added a long time afterwards. One may suppose that sometimes the bronze-casters

made vessels for stock to await customers who might, should they so wish, have appropriate inscriptions engraved. There certainly are engraved inscriptions of quite a different sort: those added to uninscribed bronzes (and the majority of ancient bronzes are not inscribed), in order to enhance their value to the collectors who prefer inscribed pieces.

The style of this *ting* belongs to the early part of the First Phase.

NUMBER THREE The *Tzŭ yü Yu* 子雨卣, inscribed First Phase Height (to top of cover), 10⅜ inches (26·4 cm.); (to top of raised handle), 11⅝ inches (29·5 cm.) Plates III-VI

LIKE all ritual vessels, the members of this class are glorified counterparts of ordinary domestic utensils. The plebeian prototype was manifestly a covered bucket with hooped handle, made from the gourd, a vessel provided by nature, or one fashioned in pottery or wood; and the handle almost certainly was made of twisted or plaited strips of bamboo. Cylindrical examples are known, but the majority are ellipsoid in cross section, and have the handle fitted either in line with the longer diameter or at right angles to it. No. 3 is an example of the latter, and according to a plausible theory this position of the handle indicates greater antiquity because, offering a practical advantage over the other arrangement, it was nearer the primitive utensil made for common use. By tilting the vessel with one hand under its base, while the other holds the handle, the contents can be poured in a more easily controlled stream than when a vessel is tilted in the direction of its shorter diameter.

Since the Sung period, when excavated bronzes were sorted into classes and identified with names found in classical literature, this kind of

vessel has been called *yu* 卣. But the fact is that no example is known to be so specified in the inscription it bears. Such vague terms as "sacral vessel" (*tsun i* 尊彝) and "precious sacral vessel" (*pao tsun ch'i* 寶尊器) are found, but never *yu*. The question is, therefore, whether *yu* really was the distinctive name applied to this class at the time when the vessels were made.

They were wine containers. Plenty of evidence supports that statement. For instance, the famous vessels found near Pao-chi in 1901 and now in the Metropolitan Museum of New York, seem to be a complete set intended for wine ritual, and they include two of the *yu* class. The hooped swing-handle possessed by most examples shows that this class was designed to be carried. That accords with accounts of *yu*, filled with wine, having been sent by the king to those who had gained his favour. No documentary evidence of such a gift could be more authentic than that afforded by the well-known inscription on the *Mao Kung Ting* 毛公鼎. It records a king's appeal to the loyalty of a high official, charging him to support the House of Chou. In grateful anticipation, rewards are conferred on him, of which one is described as "a *yu* of black-millet wine" *chü ch'ang i yu* 秬鬯一卣. The name of the recipient, Mao, not being recorded in history, cannot be depended upon as a clue to the date; but allusions in the inscription indicate that the bronze was cast at a time of danger to the throne, identified by some with the reign of King Ch'êng, when Chou supremacy had been shaken by the great revolt about 1110 B.C., according to orthodox chronology. Yet the design of the vessel is typical of the Second Phase, and that precludes so early a date. Moreover, the style of the script belongs to the latter part of the Western Chou (*v.* 60, 49, 50, pl. 33). The next serious threat to Chou rule was a rebellion which caused the flight of King Li, the tenth monarch, in 842 B.C., and the succession was not restored until 827 B.C. by his son King Hsüan. During the latter's reign of forty-five years the prevailing unrest would have justified the terms of the inscription, and perhaps then the *ting* was cast. But if this attribution be accepted, it implies that vessels of the *yu* class persisted into the Second Phase, and there does not seem to be any unquestionable example of so late a time which displays the characteristics generally assigned to the *yu*. As we shall see, the name occurs in passages pointing to dates which lessen confidence in the traditional nomenclature.

The naming of "a *yu* of black-millet wine" among the customary tokens of royal favour occurs in a number of classical texts—the *Shu ching*, *Shih ching* and *Tso chuan* (*v.* 74, III 449, 618; IV 554; V 205, 211, 658, 660). Of these the one which may be dated with certainty is the *Tso chuan* passage concerning the bestowal of "a *yu* of black-millet wine" among other grants, when the Chou king thus showed his appreciation of the ruler of Chin 晉 after the latter's victory over Ch'u 楚 and his loyalty in handing over the spoils. It proves that vessels called *yu* existed as late as 632 B.C., the year of the episode, while the text of the *Tso chuan* itself was probably written in the fourth century B.C. Another classical mention, probably dating from about the same time, is in the *Chou li*, which, however, underwent changes by Han editors. The sentence is: "In the ancestral temple he makes use of the *hsiu* 廟用脩," referring to the duties of an official, called "Ch'ang-jên, who was charged with the provision of black-millet wine and the cloth for it 鬯人掌共秬鬯而飾之" (1, XIX 22). According to a note by Chêng Hsüan 鄭玄, the word written 脩, (now pronounced *hsiu* in the Peking dialect), is equivalent to *yu* 卣. Another text has 修. The question of the "cloth" is one that will be discussed later (*v. inf.* pp. 48–50).

The word "wine" may prove misleading unless it is explained that the wine of ancient China was a sort of beer prepared by fermentation from the grain of cereals. Legge wrongly translates *chiu* 酒, the word for wine in the Classics, as distilled spirits. From the citations given above, evidently the *yu* were containers of a wine made from the black-millet (*hei shu* 黑黍); for that is the definition of *chü* 秬 given in the *Êrh ya* (3, III 8). As we have seen, the name of this wine was *ch'ang*, and the author of the *Shuo wên* describes it as made "with black millet fermented and [mixed with] *yü* 鬱 herbs; by its fragrance it causes the spirits to descend." Contrary to this is the explanation offered by the commentators to the passage in the *Chou li* quoted above when they state that the wine called *ch'ang* was not mixed with the aromatic *yü*, a kind of turmeric. Probably the *ch'ang* had a pleasant smell of its own. To a passage in the *Chou li* stating that the wine was used for washing a corpse, Chêng Hsüan adds a note that this was done because of its fragrance (1, XIX 23).

We gather that the purpose of the *ch'ang* was to attract the shades of ancestors to lend their presence in the family shrine during the sacrificial

rites. Then it was that deeds performed and honours won to the glory of the family were solemnly announced. A royal gift of such wine, trans-

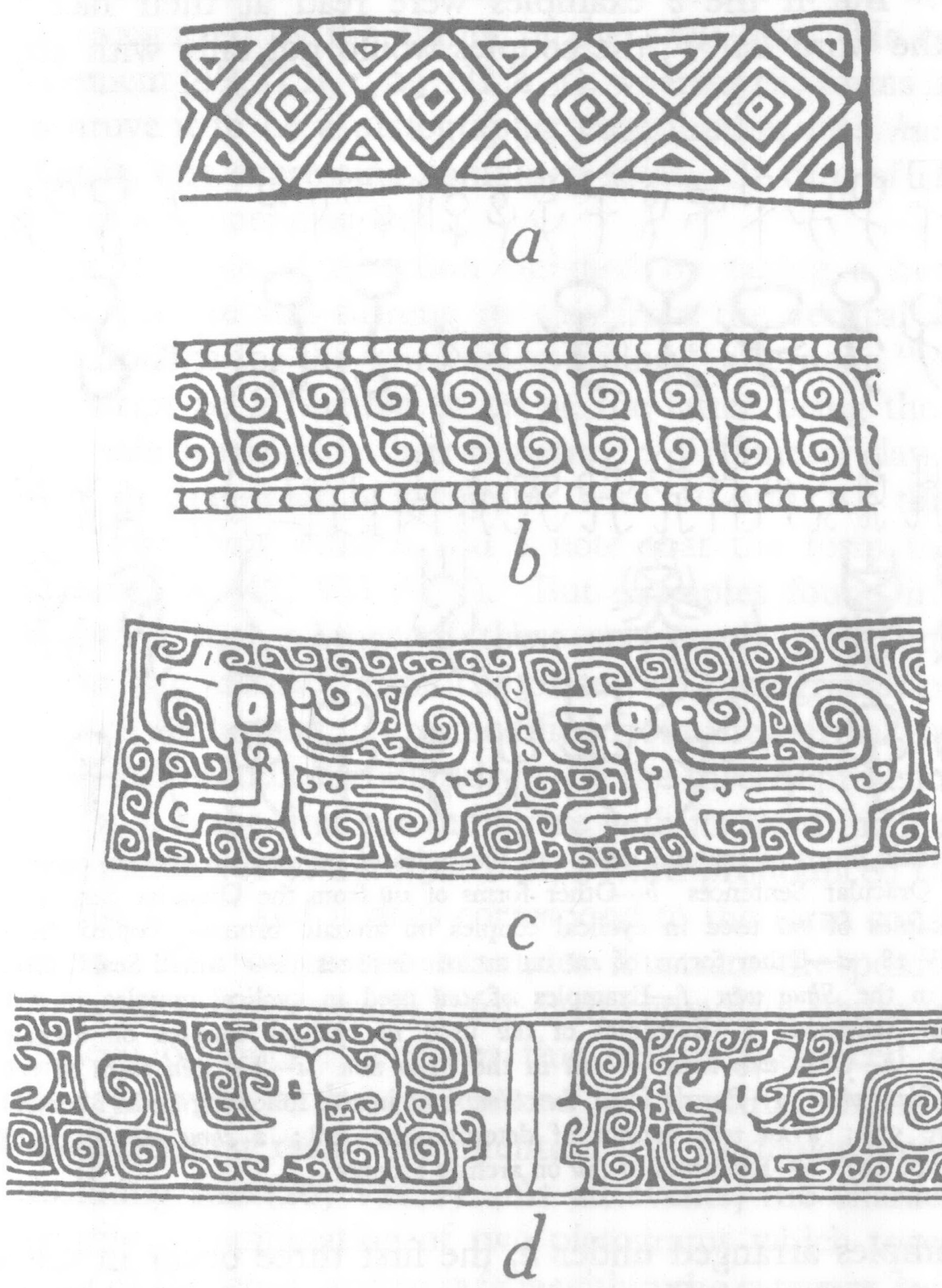


FIG. 2 Details of No. 3: *a*—on handle *b*—on rim of cover *c*—on neck *d*—on base Actual size

mitted in a *yu*, had the peculiar significance that it enabled the recipient worthily to fulfil this sacred duty to his forbears and thus bring them to participate in the enhancement of his own prestige.

No one can regard No. 3 without being impressed by its dignity and structural coherence. The proportions of each part in relation to the whole are entirely harmonious, and the patterns in low relief are subtly adapted to their setting. We are wont to regard such patterns as ornament, and, indeed, the manner of employment here justifies the term in its best sense; yet the primary purpose may have been magical or merely symbolic. Observation of the archaic bronzes tells us that the range of motifs was limited. Probably the craftsmen who made such pieces as No. 3 were constrained to follow a narrow tradition neither from choice nor lack of enterprise. The air of spontaneity and liveliness given to well-worn motifs proves a high capacity. There is no trace here of the mechanical repetition which follows exhaustion of creative impulse. In short, this *yu* is beyond question the product of a vital art in its prime, and that alone lends credibility to the report that it came from a Shang-Yin tomb near An-yang.

We have already noticed, when the two *ting* were described, the prominence of the *k'uei* dragon, and here again it appears in various guises as the main motif. On each side of the vessel a large pair, symmetrically confronted, combines magnified heads with horns of the rounded feline type to form a mask harmonizing with the general contours. The cover has the same mask duplicated, but lack of space necessitates omission of the dragons' bodies (*v.* Plate VI). Comparison favours the explanation that the so-called *t'ao-t'ieh* was derived from the merged heads of paired animals. In accordance with the usual habit of design, when space allowed, the masks on the belly are flanked each by another couple of *k'uei* dragons. They have open jaws and twisted horns (*v.* Plate IV). Hook-snouted dragons encircle the neck, and round the foot is a different kind, with flask-shaped horns, called nevertheless by the same name in the catalogues (*v.* Fig. 2 *c*, *d*). Thus four species of dragon appear on this vessel. The rim of the cover has S-shaped double-spirals, bordered with scale elements. There remains to be described the swing handle which, at the points of attachment, ends in two partly modelled heads with ears like those on the belly and cover. It carries a rhomboid pattern (*v.* Fig. 2 *a*) which is found on other handles of the most archaic types of *yu*, and one might be tempted to regard this pattern as a memory of plaited bamboo strips, did it not occur in places where such an explanation is inapplicable; for instance, on the bodies of

dragons and snakes. On the internal, flat surface of the handle is a line of scale forms shaped like those in Fig. 2 *b*, but larger.

Two characters (Fig. 3) are cast sunk below the outer face of each of the two stout processes projecting from the rim of the cover—a most unusual place for an inscription (*v.* Plate IV). Each separate component part of a ritual vessel, such as body and cover, often bears the same inscription, but repetition is rare on a single part. These two characters are of the pictographic kind: one portrays an infant, the other drops of rain falling from the sky. Why is the lower part of the infant represented with a single stroke? Because it is a new-born babe, wrapped in swaddling clothes. Why should he have one arm up and the other down? That leads to the question: why should the infant sometimes be shown with both arms raised? The answer is quoted from Hopkins' article in which with his acumen and lucidity he treats a number of problems concerned with archaic modes of writing terms for [illegible] It is a theme of particular interest, because [illegible] Chinese desire to have descendants who should duly perform sacrificial rites in the ancestral shrine—a desire often reflected in the inscriptions. "The ancient character was intended to convey in graphic fashion the joyous motions of very young children who throw up and down their quick arms, sometimes together, sometimes one up and one down" (45, 67).



FIG. 3 Inscription (repeated) on cover of No. 3 and decipherment

The swaddled infant inscribed on No. 3 introduces so intriguing a problem that I cannot pass it by without discussion. This pictogram occurs often on ancient bronzes; representative examples are given in Fig. 4 *c* and *k*. While these two groups look much alike, they are not alike in meaning; they are arranged here separately in accordance with the two different meanings they are used to convey. Group *c* is collected from inscriptions where the pictogram occurs second in one or other of five couples beginning with the words *chi* 己, *kuei* 癸, *ting* 丁, *hsin* 辛 and *i* 乙, respectively. These five words belong to a set of ten which from remote antiquity have been used in serial combination with a set of twelve other words to provide a sequence of sixty different couples for the notation of time (*v. inf.* p. 23). The particular couples from which the *c* examples are taken do serve the function of time notation, as is evident from their

contexts; and if the *c* examples be equated with the word *ssŭ* 巳, a member of the aforesaid set of twelve, the couples are proper combinations in the cycle of sixty. But if the *c* examples were read at their face value as equivalent to the word *tzŭ* 子, the couples would not tally with any in the cycle of sixty.

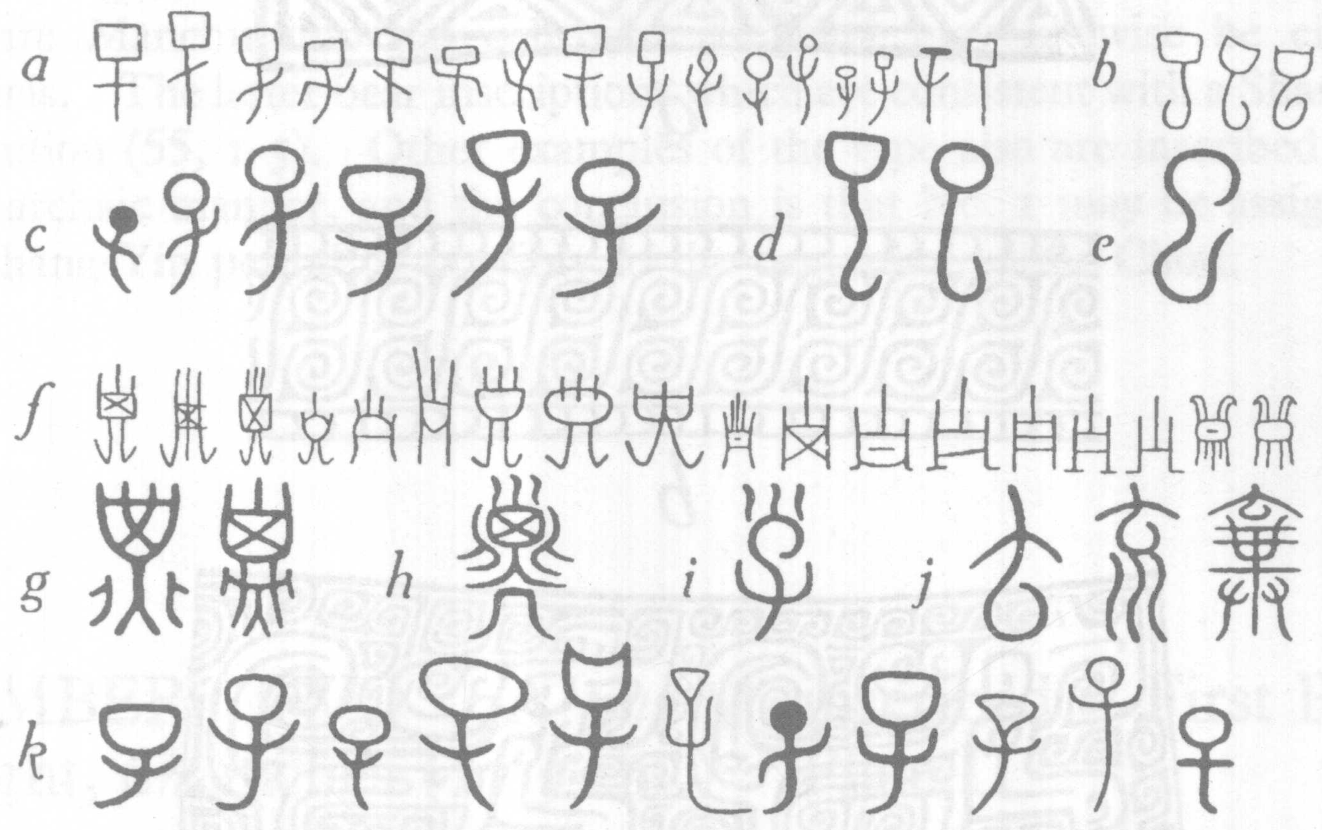


FIG. 4 Archaic forms of *tzŭ* and *ssŭ*: *a*—Examples of *ssŭ* used in cyclical couples in the Oracular Sentences *b*—Other forms of *ssŭ* from the Oracular Sentences *c*—Examples of *ssŭ* used in cyclical couples on archaic bronzes, copied from **51**, XIV 18 *d*—Other forms of *ssŭ* on archaic bronzes *e*—"Small Seal" form of *ssŭ* in the *Shuo wên* *f*—Examples of *tzŭ* used in cyclical couples in the Oracular Sentences *g*—Examples of *tzŭ* used in cyclical couples on archaic bronzes *h*—*Chou wên* form of *tzŭ* in the *Shuo wên* *i*—*Ku wên* form of *tzŭ* in the *Shuo wên* *j*—Forms from the *Shuo wên* in the following order: determinative 528; a *ku wên* variant of determinative 528; a *chou wên* form of *ch'i* (*v.* p. 14) *k*—Examples of *tzŭ* on archaic bronzes

Of the examples arranged under *k*, the first three occur in the epithet T'ien Tzŭ 天子, "Son of Heaven"; the next two in T'ai Tzŭ 太子, "Heir Apparent"; the next two in Wang Tzŭ 王子, "Son of the Prince"; the eighth in Kung Tzŭ 公子, "Son of the Noble"; the rest in the combination *tzŭ sun* 子孫 which so often at the end of an inscription is included in a sentence expressing the pious hope that "sons and grandsons may ever treasure and use the vessel." The swaddled infant never stands

for the *tzŭ* used as a member of the aforesaid set of twelve for notation by the sexagenary series, and coming second in one or other of five couples which begin with the words *chia* 甲, *mou* 戊, *jên* 壬, *ping* 丙 and *kêng* 庚, respectively—all members of the denary set.

When it occurs on a bronze, and no clue to its significance is obtainable from the rest of the inscription, as is the case here, we cannot tell in the light of present knowledge whether it stands for *ssŭ* or *tzŭ*. But probably to the ancient Chinese there was no such ambiguity. Their methods of distinguishing these two words in writing remained an enigma to students of epigraphy until the Oracular Sentences of the Shang-Yin period, inscribed on bone and tortoise-shell, first came to light at the end of last century. Before that event the swaddled infant had always been read *tzŭ*, even when it followed one or other of the words *chi*, *kuei*, *ting*, *hsin* and *i* in cyclical couples properly ending with *ssŭ*. Authors of treatises on archaic inscriptions seem to have been content with this decipherment, passing over the awkward fact that couples so composed do not exist in the cycle of sixty.

The same apparent anomaly was encountered when the Oracular Sentences began to be studied, examples being numerous on account of the frequency of cyclical notations. Absence of *ssŭ* in the form then recognized as such was perplexing; only two or three instances were found after long search (Fig. 4 *b*). Moreover, in the five couples which properly end with *tzŭ* the second character appeared quite unlike the swaddled infant pictogram, as may be seen from the examples given in Fig. 4 *f*. At first sight the forms look too varied to stand for one and the same word, but on analysis they prove to have three features in common: upright strokes at the top, a solid centre, and two (rarely more) supports below. Who would have guessed that they were intended to portray a child? Yet they were, if an entry in the *Shuo wên chieh tzŭ* be accepted as a clue to the mystery. Writing towards the end of the first century A.D., the author, Hsü Shên, includes in his account of the character *tzŭ* 子 an example which he calls a *chou wên* 籀文 form. I have copied it in Fig. 4 *h*. He describes it thus: "Hair on the top of a head; the arms and legs [of a figure] upon a stool" (49, XIV B, 6). There are several fairly close parallels to be found inscribed on bronzes, and these substantiate the *Shuo wên* example. The two copied here (Fig. 4 *g*) occur after *chia* in the cyclical notation for a day and so they undoubtedly stand for *tzŭ*. Allusions in the

inscription from which the first one comes indicate 822 B.C. as the probable date (*v.* 65, 144, 145; 66, 135). Perhaps the example recorded in the *Shuo wên* also belonged to that period, and lapse of time may explain differences when comparison is made with Shang-Yin forms which have neither the so-called stool nor the arms. As Kuo Mo-jo remarks, the author of the *Shuo wên* was mistaken in certain particulars of his explanation. The latter's "stool" really represents the legs, while his "legs" probably represent the skirts of a robe. On comparing *h* with the second form in *g* one recognizes the plausibility of Kuo's correction (67, 22). On the other hand, Kuo holds that the earliest forms (Fig. 4 *f*) have nothing to do with a child. Certainly none occurs with the meaning "child"; they always stand for the first of the duodenary set of signs. He traces the origin to the form of a scorpion, which he supposes was a Shang-Yin totem. In remote antiquity the family names may have been taken from tribal totems. Although Hsieh 契 was regarded as the founder of the Shang-Yin ruling House, the name thus written does not occur in the Oracular Sentences, while other predecessors of the first sovereign of the dynasty do occur. But there are several instances of a scorpion pictogram which may signify Hsieh or the Shang-Yin totem. Kuo argues further that the original mode of writing Hsieh was a form like 禼, which evidently depicts a scorpion. Perhaps the statement made by Ssŭ-ma Ch'ien that Tzŭ 子 was the family name assigned to Hsieh is traceable to a mistaken reading of this pictogram (*v.* 67, 62, 63).

Extant examples are too scanty on which to base a generalization, yet we may surmise that about the end of the Shang-Yin period the types shown in Fig. 4 *f* almost passed out of currency, and were revived but rarely and with modifications which tended to human semblance.

Apart from the forms already noticed (*g* and *h*) there is another recorded in the *Shuo wên* as a *ku wên* 古文 form of *tzŭ* (*v.* Fig. 4 *i*). The upstanding hair is evidently a memory of the Shang-Yin type. At all events, the curiously abbreviated child (or perhaps the scorpion) did not persist long enough to call for an equivalent when, under the Ch'in dynasty, the script was standardized in the form which has remained almost unchanged during the last two thousand years.

It did, however, persist turned upside down, but probably not as an independent character. Determinative 528 in the *Shuo wên* is an inverted

pictogram of the swaddled infant type (first in Fig. 4 *j*), which the author of that dictionary apparently took to portray a child born by difficult labour or perhaps a miscarriage. This is his definition: "Not smoothly, but abruptly emerging. An inverted 子. According to the *I ching*: 'How sudden is the coming.' An unfilial child bursting forth, not content to be within" 不順忽出也从到子易曰突如其來如不孝子突出不容於內也 (49, XIV B, 6, 7). The words quoted from the *I ching* refer to the fourth line of the hexagram called *li* 離, and the "suddenness" is compared to that of "fire, death and casting away" (7, III 28). But perhaps the author of the *Shuo wên* through ignorance of obstetrics misunderstood a representation of normal parturition. About the beginning of the fourteenth century that was the view held by Tai T'ung 戴侗 who remarks in the *Liu shu ku* 六書故: "At childbirth the head is the first to descend. Hsü treats the right presentation as an unfavourable one, not having inquired into the natural course of events" (*v.* 45, 64). Under the determinative 528 there is entered the form which I have copied second in Fig. 4 *j*. Clearly it is but an inverted example of Fig. 4 *i* which is said in the dictionary to be a *ku wên* form of 子, as we have seen. It is equated with *t'u* 突, "sudden, abrupt," the word which occurs in the passage of the *I ching* cited above.

As previously hinted, the pictogram of the swaddled infant with hair on end was a sort of compromise manifesting in the long hair a memory of the obsolete forms in Fig. 4 *f*, *g* and *h*. I use the term "compromise"; for so young an infant to have long hair is unusual. Though the two forms of the inverted infant, copied in Fig. 4 *j*, appear in the *Shuo wên*, they seem not to have survived long enough to have passed into common currency as independent characters. They did, however, enter into the composition of other characters: for example, the first form appears in *ch'i* 棄, and the second in *liu* 流, *yü* 毓 and *shu* 疏.

Ch'i is represented in the *Shuo wên* with a "Small Seal" form retaining the hair which is absent, however, from the *chou wên* form copied third in Fig. 4 *j*. To the latter the current *k'ai shu* version corresponds. This interesting character is composed of four pictographic elements: the inverted child and below, held by two hands, a hafted object which Chalmers calls "a muck rake or scoop of wickerwork" (15, 148), and Hopkins "a winnowing basket" (45, 65). It is a pictorially significant compound for

a word which means " to reject, cast away, abandon," and some see in it evidence of infanticide. But the author of the *Shuo wên* takes a kinder view, and describes the child as " rebellious *ni* 逆 " (49, IV B, 1), consistently with his explanation of determinative 528 (*v. sup.* pp. 13, 14). He interprets an abnormal birth, perhaps an abortion, apparently using " unfilial " and " rebellious " as terms used for an aborted infant, based on the idea that, refusing to remain in the mother's womb, it emerges abruptly and abnormally. Hopkins calls my attention to the comment by Tuan Yü-ts'ai 段玉裁 which read in this sense is : " *t'u* is an abortion, [a thing] which people throw away 㐬者不孝子所棄也." Yet perhaps Tai T'ung is right, and the inverted child signifies an ordinary, natural birth ; in which case the character *ch'i* must imply infanticide. At all events, the swaddled legs are hardly appropriate.

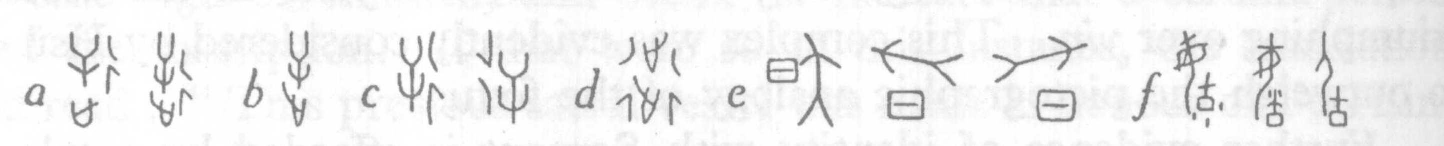


FIG. 5 Examples of four characters in the Oracular Sentences : *a–c*—Forms of *ni* *d*—A form of *pu* *e*—Forms of *tsê* (*v.* p. 16) *f*—Forerunners of *yü* (*v.* pp. 17, 18)

Relevant to this argument is a note on the archaic mode of writing the word *ni* " rebellious " mentioned above. Five forms from the Oracular Sentences are given in Fig. 5 *a-c*. The two most complete examples (*a*) are seen to be composed of two elements, an inverted figure of a man viewed frontally and the form 辵 which is determinative 33 in the *Shuo wên*. In that dictionary the latter is explained as " to take [a few] steps and then to stop 乍行乍止 " (49, II B, 1). This notion is expressed more completely in the Oracular Sentences with a form such as that shown in Fig. 5 *d*, which is recognized by Lo Chên-yü as the archaic prototype of *pu* 步, " steps " (87, II 65). It depicts two footprints within cross-roads. In *a* only half of the cross-roads pictogram appears ; from *b* the cross-roads part of the element is omitted. From *c* the footprint part is omitted. Lo Chên-yü's explanation of the archaic forms of *ni* (Fig. 5 *a-c*) is that they " portray a man entering from outside, and [someone] moving to meet him " (87, II 66). The *Shuo wên* gives *ni* the sense of *ying* 迎, which means " to meet, encounter " and " to oppose " (49, II B, 1, 2). For our present purpose the chief interest of the archaic *ni* is the presence of the

human figure upside down offering a sort of parallel to the inverted infant, since both are inverted in order to express position or direction of movement. The full significance of this element in the character for *ni* seems not to have been recognized by the author of the *Shuo wên*. He explains it as a phonetic element (49, II B, 1, 2 ; III A, 1), whereas the forms in the Oracular Sentences prove it to be a pictographic contribution to a *hui i* 會意 compound, that is, one expressing combined ideas. It can, of course, be said to function as a phonetic as well.

Another example of direction signified by taking a human figure in the standing posture and turning its axis from the vertical norm is found in certain scriptions for the word *tsê*, meaning " afternoon " or " slanting." In current script *tsê* is written 昃 or 厢, the latter being the form entered in the *Shuo wên* where it is thus explained : " Time of day when the sun is declining in the west. Composed with 日 and 仄, the latter being phonetic." The Sung editors add a note that the form then commonly used was incorrect (49, VII A, 1). But examples found in the Oracular Sentences prove that neither of these statements gives an entirely true account ; for the archaic forms comprise two pictograms, one of the sun and the other of a human figure modified from the normal, upright, frontal view in a manner to indicate obliquity. Of the three representative examples copied in Fig. 5 *e*, the first has the figure with its head inclined to one side. It is determinative 391 of the *Shuo wên*, a word pronounced *tsê* and meaning " head on one side," and it does correspond to the form condemned by the Sung editors. The other two examples illustrate the point stated in the first sentence of this paragraph ; for each contains a figure in the standing posture placed obliquely. Perhaps this obliquity sufficed to signify that the sun's rays were to be understood as slanting, though Yeh Yü-sên 葉玉森 suggests that really the intention was to depict long shadows cast by the declining sun (26, VII 1). At all events, the character must have been primarily a combination of two pictograms which together conveyed the meaning of the word, and so it falls within the category *hui i*, " associated ideas." Examples composed with the 夨 form might, it is true, be classed as phonetic compounds. Still, if the author and later editors of the *Shuo wên* had had our advantage of being able to consult the Oracular Sentences, doubtless they would have written differently.

Of the three characters instanced above as preserving the form of an

inverted and apparently hairy child, the first one calls for notice, if for no other reason than it throws further light on the infanticide implication, already touched upon. I am indebted to my friend L. C. Hopkins for pointing out its full significance. The word *liu* 流, " to flow," is entered under determinative 411 in the *Shuo wên*, since a form written with the water pictogram duplicated is the one given as the norm, but another noted as a variant has a single " water " and so corresponds to the form as now written (49, XI B, 1). The 㐬 part of the character is explained as *t'u hu* 突忽 " abruptly," nothing being said about a phonetic, so that, according to Hsü Shên's mode of expressing himself, he means that *liu* should be assigned to the " associated ideas " class. In view of our previous argument, the ideas called up by this pictographic complex may have been an aborted or still-born babe conveniently committed to the river's current for disposal.

Compare with this the character 汓 for the word *hsiu*, now generally written 泅, and meaning " to swim." In the *Shuo wên* it is defined, " to float along on the top of water," but a note is added that " anciently it was used sometimes for *mo* 沒 " (49, XI A, 7). The latter word means " to submerge " " to sink something in water." Thus *hsiu* is one of the many Chinese words with contradictory meanings. The character *hsiu* depicts water and a child—a living child in contrast to the presumably still-born babe of the character 流. Perhaps it may be taken as another piece of evidence that infanticide prevailed in ancient China. A pictogram, to have been effective, had to be obvious, it had to arouse a train of ideas grown familiar through ordinary experience, and so, if the character for *hsiu* actually was devised to represent the drowning of an unwanted child, the inference is that the practice must have been a common one.

The next character, *yü* 毓, is given in the *Shuo wên* as an occasional variant of the character *yü* 育, meaning " to rear children and teach them to be good " (49, XIV B, 7). But in the Oracular Sentences there occurs fairly often the archaic forerunner of this so-called " occasional variant " and evidently it expressed a basic notion and had important implications. It represents clearly the act of childbirth as may be judged from the examples copied in Fig. 5 *f*. The babe makes a normal head-first entry into the world, and the figure of the mother is represented by one or other of three forms ; that used for writing *mu* 母, the word for " mother " ; that for

nü 女 " woman," differing but slightly from the last ; and that for *jên* 人, " a human " merely. Many examples have two or three dots or strokes above, beside or below the child's head, and these " depict the amniotic fluid at the moment of birth," according to Wang Kuo-wei 王國維 who assuredly is right (*v.* 26 XIV 16 ; 47, 38). So the truth about the three wavy lines pendant from the inverted infant's pate, as copied second in Fig. 4 *j* and persisting in the current form of the character under discussion, is that they do not really represent hair. They are transformed vestiges of the burst of amniotic fluid, a critical event in parturition and therefore naturally represented in the primitive pictogram. It seems that in course of time the symbolic drops were mistaken for a shock of hair, and the infant in process of being born became an inverted counterpart of the maturer child with a strong growth of hair, such as appears in Fig. 4 *f-i*. Wang's illuminating essay, however, is less concerned with the structural history of 子 than with proving that the archaic forerunners of 毓 stood for a word other than *yü* " to rear." It was *hou* 后, " sovereign successor," and he is able even to demonstrate the unexpected fact that 后 itself was derived from the pictogram exemplified in Fig. 5 *f*, and particularly from the third form copied there. Kuo Mo-jo goes further, arguing that the archetype of 毓 and 后 manifests a remote, matriarchal state of society when the supreme function of bearing children entitled woman to the rulership (*v.* 26 XIV 16, 17 ; 47, 34-42).

As before stated, the words *tzŭ* and *ssŭ* are both members of the duodenary set used for cyclical notation, *tzŭ* being first and *ssŭ* sixth in the proper order of the series. While *ssŭ* serves no other function except as an introductory particle and a personal name, *tzŭ* means also " son," " offspring." A pictogram of the concrete " offspring " in the form of a swaddled child was an obvious and effective mode of writing the word *tzŭ*. But that left the intangible *ssŭ* unprovided for, and, since originally the two words had much the same sound, the borrowing of the swaddled child to write *ssŭ* was an expedient thoroughly in keeping with the Chinese habit of script. The swaddled infant having been loaned to *ssŭ*, some different means of writing *tzŭ* had to be devised, and the outcome was the curious symbol for a child at a later stage of development, with hair grown and legs free. These two features are the most prominent and constant among those displayed by the representative examples in Fig. 4 *f*. Lack of trunk

and arms is perhaps explainable on the supposition that the aim was to present a marked contrast to the swaddled infant form. Magnification of the head to the neglect of other parts of the body was a common practice in archaic script. But, if Kuo's attractive and ingenious theory be accepted, this line of argument becomes invalid, and we must recognize the earliest forms of *tzŭ* as depicting a scorpion.

There remains the curious form with little human semblance copied in Fig. 4 *b*, *d* and *e*. It provides yet another mode of writing *ssŭ*, confusion being avoided by limitation of function; for apparently it serves as a particle and perhaps rarely as a name, but never for cyclical notation. Examples from the Oracular Sentences (*b*) are abbreviations for writing such words as *ssŭ* 祀 and *fei* 妃, and there is the instance of *mu ssŭ* 母巳 which may possibly stand for a personal name. More often it occurs as a component part of the characters 汜, 祀, 妃 and 改. The functional distinction stated above is demonstrated in the inscription on an early First Phase bronze, the *I Chia* 巳斝. Here a *kuei ssŭ* day is written with the swaddled infant type, while the sacrificial *ssŭ* 祀 contains the form in *b* (*v.* 97, Coll. of Wang Ch'ên 王辰, 11, 12). Kuo Mo-jo suggests that this character for the word "to sacrifice" portrays a human figure reverently kneeling before a spirit, and with more plausibility he points to certain forms of *kai* 改 "to correct" as appropriate pictures of a hand holding a rod over a kneeling child (67, 27).

But a more likely explanation is the generally accepted one that the form in question depicts a human embryo at the stage when the head appears the most developed part. The author of the *Shuo wên* takes that view when he deals with *pao* 包, determinative 344 (49, IX A, 6). It conflicts with his definition of the same form (Fig. 4 *e*) which he enters as determinative 533, the "Small Seal" for *ssŭ* (49, XIV B, 7). Faced with the difficulty of defining this nebulous particle, he resorted to the expedient of equating it with another word meaning "done," "finished," "already." Anciently the two sounded much alike and were written alike, but later the second was pronounced *i* and written 已. Perhaps it would be nearer the truth to say that still in his time one word conveyed two meanings which afterwards became differentiated by the adoption of distinctive sounds and scriptions. Yet that does not exhaust the arguments in this many-sided problem; Hopkins' writings should be consulted (45, 60-63; 48, 374-382).

Hsü Shên's definition is: "In the fourth month the *yang* influence has already emerged, and the *yin* influence has already hidden itself. Then all living things appear, completing the ordered beauty [of nature]. Since 巳 [cannot be depicted], it is symbolized by a serpent. A pictogram."

Here then is a clear implication that the form copied in Fig. 4 *e* portrays a serpent, and seemingly it contradicts what the author says about *pao*, as remarked above. But the discrepancy is understandable if one supposes that he felt constrained to take into account certain recognized astronomical and cosmological correspondences. First there was the striking resemblance between 巳 and the configuration of the Celestial Serpent constellation (T'ien Shê 天蛇) which comprises fifteen stars of Lacerta and seven of Cygnus (*v.* 93, 301, 302). Then he must have been familiar, too, with the various correspondences assigned to 巳 in the table on p. 133: Serpent, fourth month, beginning of summer, and *yang* in the ascendant triumphing over *yin*. This complex was evidently considered by Hsü Shên to outweigh the pictographic analogy of the fœtus.

Further evidence of identity with Serpent is afforded by a tale concerning the rivalries between certain southern states towards the end of the Chou period. Prince Ho-lu 闔廬, who reigned over Wu 吳 514-496 B.C., wished for a stronghold where his treasure should be safe from enemies. The site having been chosen with due regard to geomantic influences, two surrounding walls were built, an outer with a circuit of some 15 miles and an inner of some 3 miles. Gates were constructed with magical intent; for instance, on the north-west, there was one called Ch'ang 閶, because it should admit the Ch'ang-ho 閶闔 wind blowing from that direction (*v.* 19, III 312). Ch'u 楚 lay to the north-west, and so the gate was appropriately regarded as conducive to the conquest of that State. Wu lay north-westward of its bitterest enemy the State of Yüeh 越, the two States being in the respective positions of *ch'ên* and *ssŭ*. This orientation may be understood on turning to the Figs. 35 and 36, which also explain correspondences with Dragon and Serpent, respectively. So in order to bring magical influences to operate in his favour, the Prince of Wu had a wooden serpent, pointing north, placed on the south gate of the outer wall, but the serpent's head was made to turn back as if the creature were about to flee from the effigy of a dragon placed immediately to the north of it on the south gate of the inner wall (16, IV 2).

For our present purpose the point of chief interest is the identification of *ssŭ* with Serpent at the beginning of the fifth century B.C., if the narrative may be accepted as a true one. It would serve to prove that the notion had become established long before the author of the *Shuo wên* wrote his definition. But the fact should be remembered that the *Wu Yüeh ch'un ch'iu*, from which I have quoted, dates only from the first century of our era. Corroborative evidence of currency at least as early as that is afforded by Wang Ch'ung's equation of *ssŭ* with Serpent (117, III 21; XXIII 3).

In short, the serpent explanation need not shake our belief that the remote ancestors of the form with which *ssŭ* has been written for some two thousand years depict a fœtus. As a fœtus it falls into line with the other scriptions in Fig. 4 representing various stages of infant development. Association with Serpent was an accretion derived from notions which gained acceptance later than the early part of the Chou period.

Those who have read through this long argument will doubtless be satisfied that in the light of present knowledge the first character on No. 3 may be read *ssŭ* with as much reason as it is read in Fig. 3, and so the vessel might just as well be called the *Ssŭ yü Yu*. Having arrived at this conclusion, we are hardly nearer the meaning of the inscription. Two *chüeh* likewise inscribed are recorded (85, XV 28). A certain *ting* may afford a clue, since this combination appears on it also, but followed by the character 己 for *chi* (85, II 31). The last-mentioned word being one of the "Ten Stems" used singly to name ancestors (*v. inf.* pp. 23, 24), it may indicate the ancestor to whom the *ting* was dedicated, and, if so, the first two characters may be a mark of ownership. Perhaps all four vessels were cast as members of a set intended to serve the same ritual office or at least for the same family shrine.

NUMBER FOUR The *Fu Hsin Yu* 父辛卣, inscribed First Phase Height, to top of cover, 8⅝ inches (21·9 cm.); to top of raised handle, 9¼ inches (23·5 cm.) Plate VII

THIS is a rare type of *yu*. The flask-shaped body is round in cross-section, and probably it followed closely a pottery prototype. Its form would not be so impressive without the swing handle which when raised balances the rotundity of the belly. Semi-realistic deer-heads on the handle-ends, three raised fillets and a groove encircling neck and shoulders, respectively, are the sole adornment. The hoop of the handle is plain; the inequalities visible in the photograph are merely caused by corrosion.

An inscription of eight characters (Fig. 6) is cast sunk below the interior surfaces of both cover and base, that on the cover being partly hidden by corrosion products. The meaning of the first character is not known. It is composed of two elements: a frame and something inside. As to the former, many explanations have been advanced, but with no satisfying finality. It appears again on No. 8, and more is said about it under that heading (*v.* p. 32). The character at the top of the second column is a pictogram of bamboo or wooden slips tied together with a cord, the stationery of antiquity which was still in vogue under the Han and later, as evidenced by the finds of Stein and others in Eastern Turkestan. Probably the Chinese habit of arranging texts in vertical columns took its origin from these narrow slips on which the characters were written one below the other. While we may believe that many slips were tied together to make a book, and shorter documents needed but a few, the pictogram is standardized to four vertical strokes; rarely it has one more or less. The word signified is *ts'ê*



□ 作 父 辛
册 寶 噂 彝

FIG. 6 Inscription on base of No. 4 and decipherment

or *ch'ai*, meaning "brevet," the warrant conferring an honour from the king or a ruling prince. Used as a verb, it means "to grant a brevet."

Taking the undeciphered first character to be a personal name, a translation of the inscription is: ". . . made this precious sacral vessel [in honour of] Fu Hsin and [to commemorate his] brevet." Such an interpretation accords with the usual tenor of the longer inscriptions on ritual bronzes. The recipient of a distinction celebrates the event by casting one or more sacrificial vessels for the family shrine. While adding an inscription to glorify himself, he includes a dedication to an ancestor, and thereby with befitting filial piety he causes the latter to share his honour. But here there is the possibility that the two uppermost characters are not connected syntactically with the rest of the text. Examples are known where the pictogram, rendered above as "brevet," occurs in combination with some sign or emblem, and seems to indicate that a certain person drafted the inscription. If that were so in this instance, the translation should read: "This precious sacral vessel was made in honour of Fu Hsin. Written by . . ."

The word "Fu" means "father" or "uncle," and "Hsin" is one of the "Ten Stems" (*shih kan* 十干) which in combination with the "Twelve Branches" (*shih êrh chih* 十二支) have been used from ancient times for the cyclical system of naming the days. The so-called "Ten Stems," a term probably dating from the Han period, were signs devised to name the days of a ten-day week, called *hsün* 旬. As late as 535 B.C. we find the term "Ten Days" (*shih jih* 十日) in use (**74**, V 611, 616). One from each of these two sets are taken in rotation, according to their proper order, so as to form sixty different pairs corresponding to a sequence of the same number of days. Under the Shang-Yin dynasty and at the beginning of the Chou an ancestor was designated posthumously by the first character of the cyclical date on which he was born. As a means of indicating an individual this was somewhat vague, since within the short span of a cycle each of the "Ten Stems" occurs six times, and it must often have happened that two or more ancestors shared the same cyclical designation. These cyclical names served also as guides to sacrificial practice. An ancestor, named by this method, may be regarded as having a birthday in every week of ten days. The custom was to inquire by divination on such a day when it would be propitious to sacrifice to the

respective ancestor; therefore memoranda were needed of the days on which divination might be performed with propriety. Perhaps the bronze vessels dedicated to a particular ancestor, as shown in such an inscription as this, were reserved for sacrifices in his or her honour, but we have no certain information on this point.

As to the date of this piece, the style of the inscription indicates the Shang-Yin period or the early part of the Chou.

NUMBERS FIVE AND SIX A pair of *ku* 觚, uninscribed First Phase Heights, 11¾ inches (29·8 cm.) and 11⅝ inches (29·5 cm.), respectively Plates VIII and IX

When an occidental first views a representative collection of Chinese ritual vessels, he generally picks out one shaped like this pair as the most pleasing. Its slender grace and harmonious proportions, and probably, too, the refreshing strangeness of an unaccustomed form attract him. He feels instinctively that it manifests the vigour, assurance and good taste of a great art at its zenith.

While there is much variety among vessels classified as *ku*, this pair may be taken to be fairly representative. Some are slimmer and some are stouter; indeed, a series might be mustered showing a gradual broadening until a type is reached which is broader than it is high. The two extremes differ so greatly that one hesitates to call them by the same class name. Yet at no point in the series can a hard and fast line be drawn, on one side of which are *ku*, and on the other members of a different class. Chinese cataloguers escape the quandary by somewhat capriciously naming the broader kind *tsun* 尊. But *tsun* is a term of general import and probably never was used specifically for a particular class (*v.* **127**, I 24, 25, 42, 43).

Even the term *ku* and the character with which it is written are obscure in origin, and none of the vessels called *ku* is known to bear this name inscribed on it.

Archæological experience introduces another complication; for while *ku* showing First Phase characteristics are numerous, no later example of unquestionable genuineness is known. Yet the name *ku* occurs in classical literature relating to the latter part of the Chou period. There is, for instance, an utterance attributed to Confucius: "A *ku* without its flanges. What a *ku!* What a *ku!*" (*cf.* **74**, I 192). He is believed thus to have expressed disapproval of a decadent age which retained the terms of antiquity but not the realities. Hence one may infer, if the above be a correct reading of the passage, that vessels called *ku* still existed in his time, though they had departed from the traditional standard. And this standard, it should be remarked, prescribed the presence of flanges. The flanges are, we know from observation, often a feature of archaic examples, as they are here. On the other hand, many *ku* without flanges have been excavated at An-yang, and this fact has led Li Chi to identify as their archetype certain pottery vessels of like shape which also have been found on that site (**75**, 472, 476, fig. 12). Absence of flanges might with equal reason be taken to indicate descent from a combination of two bovine horns (*v.* **69**, 693, 694, figs. 13, 14). This accords with the presence of the "horn" determinative in the character for *ku*.

The *ku* are wine-vessels, and they served as goblets. According to the *Shuo wên chieh tzŭ*, they were used during festivals called *hsiang yin chiu* 鄉飲酒, at which, we know from a description in the *Li chi*, banquets were held with elaborate ceremonial (**27**, II 652-667). Of course a dictionary compiled at the beginning of our era can hardly be a true guide to usages more than a thousand years before. During recent excavations of tombs near An-yang, *ku* have come to light in such numbers that probably they figured in funeral rites.

While these two vessels are so much alike in size, general design and patina that they may be described as a pair, close examination proves that they differ in minor details of ornamentation, and certainly they did not come from the same mould. They were acquired by Mr. Cull separately and from different sources. Yet the resemblance is such that they must have had a common provenance, which probably was the Shang-Yin site

near An-yang, if we accept as evidence the similarity to bronzes said to have been excavated there.

The details of pattern in no two fields of either goblet tally exactly, though the general scheme is one of bilateral symmetry. In order to demonstrate how the halves of a single field differ, I have made a careful drawing of one of the four ornamental processes on the trumpet-shaped upper section (Fig. 7). We are concerned now not so much with the basic motif, which had an animal origin, as with the mode of rendering the component elements. Apart from the two eyes and the horns (or eyebrows) above them, the design is expressed mainly in terms of straight lines, squared spirals, curls and T-shaped forms. Had these been made to match exactly on either side of the median line, the effect would have been dead and monotonous. Instead, the craftsmen far from aiming at meticulous duplication varied the detail without restraint so long as the general balance was preserved, and the result is lively and pleasing.

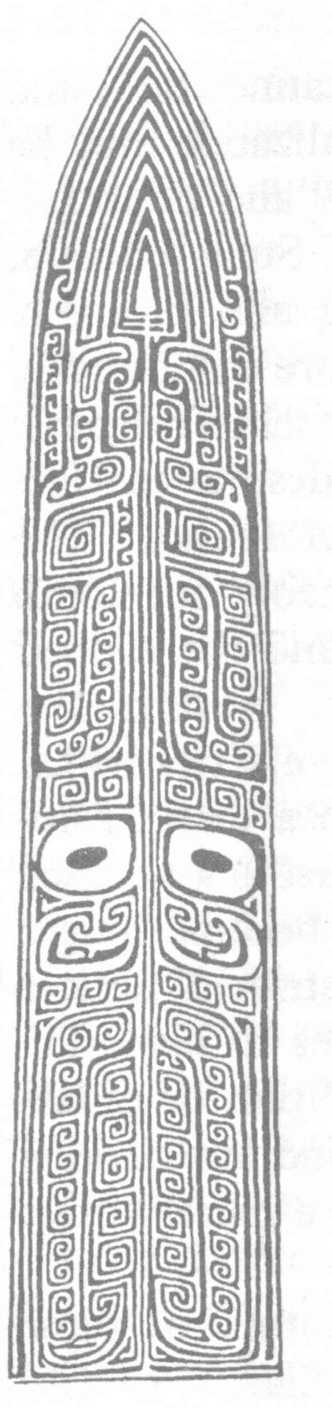


FIG. 7 Detail of No. 5 Actual size

The photographs on Plates VIII and IX are purposely taken from different aspects to show the decorative motifs in their entirety. Observe that each vessel's lower and middle sections are divided equally by four vertical flanges. In each of these eight quarters are the vestiges of a *k'uei* dragon with open jaws and curved or twisted horns. The only part to have escaped extreme disintegration and abbreviation is the head which is seen in profile. Thus there are eight more or less complete and contiguous heads forming four pairs, a flange being in the median line of each pair which composes a so-called *t'ao-t'ieh* mask. On either side of the same median lines are two other confronted creatures: cicadas at the top of the lower section, and serpents at the base of the upper. There remains to be noticed the presence of two cross-shaped forms sunk in the constriction between the middle and lower sections, the crosses being in the aforesaid median lines, which are those of the flanges on two opposite sides of the vessel. Most of the *ku* have crosses like these or cross-shaped

perforations opening into the cavity of the hollow basal section. Vertical depressions or slits generally alternate with the crosses, being situate in the other pair of opposite median lines. Thus, these crosses and slits occur along the equidistant junctions of the four sectional moulds which were used in the casting of a *ku*, and probably they were expedients for ensuring that the mould sections were rightly assembled—an explanation which, so far as I know, has not been previously suggested. Normally they are filled with bronze plugs; but often the plugs are imperfectly fitted or have fallen out, leaving corresponding depressions or apertures as the case may be.

NUMBER SEVEN A *chih* 觶 First Phase Height, 5¾ inches (14·6 cm.) Plate X

LIKE the *ku*, the *chih* are wine goblets and called by a name which was assigned to them in the Sung period when excavated bronzes were identified with traditions of bygone rites. Since, as with the *ku*, no example has been found to have its own class name inscribed on it, the correctness of the *chih* classification is not beyond question. Vessels like No. 7 seem to have gone out of fashion by the end of the First Phase, but to have been revived during the latter part of the Third Phase. In 1888 three vessels, shaped in accordance with the early tradition, were unearthed some fifteen miles west of Jui-chou in the north of Chiang-hsi province. Two are stated in the inscriptions they bear to have been made by a prince of the Hsü 徐 State who is mentioned in a *Tso chuan* passage relating to the year 536 B.C. So the date is certain; and each piece bears a class name which, if synonymous with *chih*, supports the Sung identification (*v.* 65, 162).

Another point in common with the *ku* is the resemblance of certain examples to vessels usually classified as *tsun*. Confusion with the *hu* 壺 is avoided when it is remembered that the latter generally have "ears" or

handles and a less expanded mouth. The Cull piece may be accepted as a thoroughly typical *chih*. Its oval shape in cross section is shared by many members of the class, though some are round. Some are covered. There is no indication that this *chih* originally had a cover. While examination fails to find any trace of an inscription, possibly there is one hidden by corrosion products.

Fig. 8 shows facsimile drawings of two designs each of which is repeated four times in a decorative zone encircling the vessel. Anyone unfamiliar with the archaic bronzes would hardly guess that these two manifest the same motif in different stages of stylization. Yet the fact of their affinity would be clear if a series of examples, collected from various sources, were arranged to demonstrate the progressive transformation.

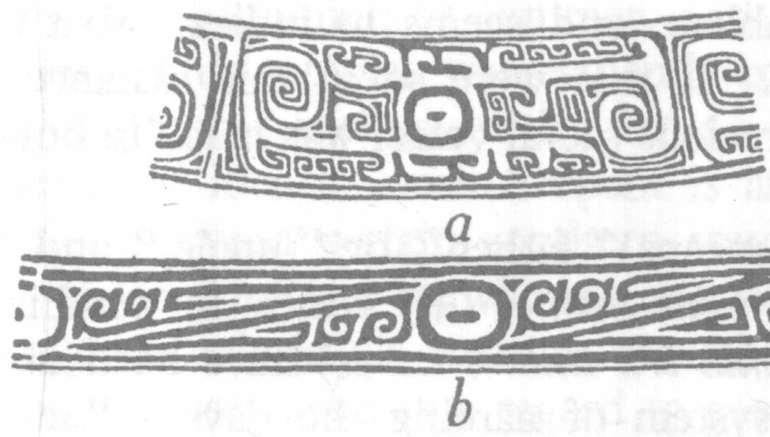


FIG. 8 Details of No. 7: *a*—on neck *b*—on base Actual size

Each would then fall into its proper place in a long sequence beginning with a naturalistic presentment of the fabulous creature known to Chinese cataloguers as the *k'uei* dragon. Such a form has been noticed on all the pieces previously described in these pages, except No. 4, and it appears on several which follow. The presence together of two widely separated stages in the simplification and stylization tends to disprove the theory that an advanced stage of the process indicates a comparatively late date. Indeed, examples similar to Fig. 8 *b* are to be found on bronzes which bear inscriptions pointing to the early part of the First Phase, and there seems no cause to deny a like antiquity to this piece. If we take as criterion a certain inscribed *yu*, which is mentioned hereafter (p. 32), an attribution to the beginning of the Chou period is plausible. The designs shown in Fig. 8 are almost exactly paralleled on the handle and foot of the *yu* (*cf.* 101, 15, 16).

NUMBER EIGHT A *chüeh* 爵, inscribed First Phase Height, 8 inches (20·3 cm.) Plates XI and XII

AGAIN this is one of a class for which a specific name cannot be found inscribed on any of its members. At least, this generalization may be qualified by noting that if there be exceptions, they are few and doubtful. For the name, then, we have to depend upon identification by Sung scholars. The *chüeh* are wine vessels which were used for drinking and probably also for pouring libations. They may be said to be even more distinctively Chinese than the *ku*; no other civilization has produced a vessel to resemble them in shape. Clearly they belong to a metal technique, despite the fact that certain archaic examples made of pottery have been found. The latter seem likely to have been cheap substitutes, presumably for tomb burial; for the long thin legs, triangular in cross section, and the capped pillars, rising from the rim, are unsuited to a clay medium. Nevertheless Li Chi was able to collect, among prehistoric pottery vessels, a series which he reasonably takes to manifest progressive steps leading to a direct forerunner of the *chüeh* (75, 471-476, figs. 9, 10, 13, 14). The first is a handled jug with small spout and three short legs. Then the legs become longer and the beginnings of a neck appear; with a more constricted neck a "tail" (*wei* 尾) develops opposite the spout. Further stages in evolution probably occurred only in the medium of bronze: the addition of pillars (*chu* 柱), the extension of spout and "tail," the lengthening and out-curving of the legs, and the dwindling of the handle until it became a mere vestige of its substantial prototype.

There remains to be explained the most intriguing feature of these strangely shaped *chüeh*, the presence of the two capped pillars. Li Chi advances the theory that they are elaborated vestiges of a technical expedient for strengthening the joint between the spout and body in the pottery prototype (75, 474, 475). A totally different derivation is suggested by Kuo Pao-chün in his thesis that many of the ritual vessels are to be traced back to either one or other of two natural containers, the ox horn and the gourd (69, 690-692). The horn when filled needs some support to hold it upright, and he pictures in his mind two bamboo sticks lashed one on either side. The upper ends of the sticks, rising above the mouth of the

goblet, persisted as the two pillars, while the two lower ends were modified, becoming legs with an outward curve in order to match the point of the horn which provided the third leg. A memory of the lashing remained as the decorated zone encircling the body of the vessel, and a loop of the cord, serving as handle, was afterwards reproduced in bronze. It is an attractive theory, and some justification for it is lent by certain pictographic characters in the Oracular Sentences.

Another explanation of the pillars, based on utility, was suggested to me by the custom during comparatively modern times of drinking the liquor warm. Supposing that the vessel were heated in a brazier, how was it lifted without spilling the contents? The loop-like handle is small, awkwardly placed and at times might be too hot to touch. Besides, it offers a precarious hold for tongs, if the *chüeh* is to be kept upright. The pillars, on the other hand, are in a position of mechanical advantage, and might when gripped with tongs, have provided an escape from such difficulties. This surmise has at least the merit of accounting for the caps, which would be necessary to prevent the tongs from slipping.

The ornamental zone is divided into four equal parts by the handle and the three vertical flanges. Evidently the mould for the body was made in four sections, and they met along the median lines of the flanges, except of course where the handle is. Perfect apposition occurred only along the flange opposite the handle, and so this flange is the sole one successfully perforated to form three down-turned hooks alternating with two squared processes—a feature of the early part of the First Phase. The other two flanges, owing to inexact adjustment of the moulds, show on either side of each flange mere grooves which, had they coincided, would have resulted in perforations. The handle and opposite flange divide each a so-called *t'ao-t'ieh* mask composed of a hybrid design which contrasts with the more usual combination of two dragons. Details may be seen in the facsimile drawings (Fig. 9), where a crested bird motif appears replacing each dragon's tail. It is a rare device which occurs chiefly on vessels of the *chüeh* class, and seems to have escaped writers on the bronzes. Even such an acute observer as Karlgren omits to notice a variant when describing a *kuei* in the collection of the late H. G. Oeder (60, 115, pl. 12). There the bird stands complete as an independent unit in the place often occupied by a lateral dragon. Here bird and dragon merge to form a half of the so-called

t'ao-t'ieh. The heads of both creatures are most fully represented, and the bird has a raised leg and claw. Their hinder parts have disappeared, but there is the vestige of a common body. On one side of the vessel, where the narrow flange leaves more space for elaboration of the design, the shared body has a wing clearly expressed (Fig. 9 *b*); on the other the wing is shortened to a spiral (Fig. 9 *a*); on both a rudimentary dragon's leg appears below the body.

This merging of different species is one of those features, recognized

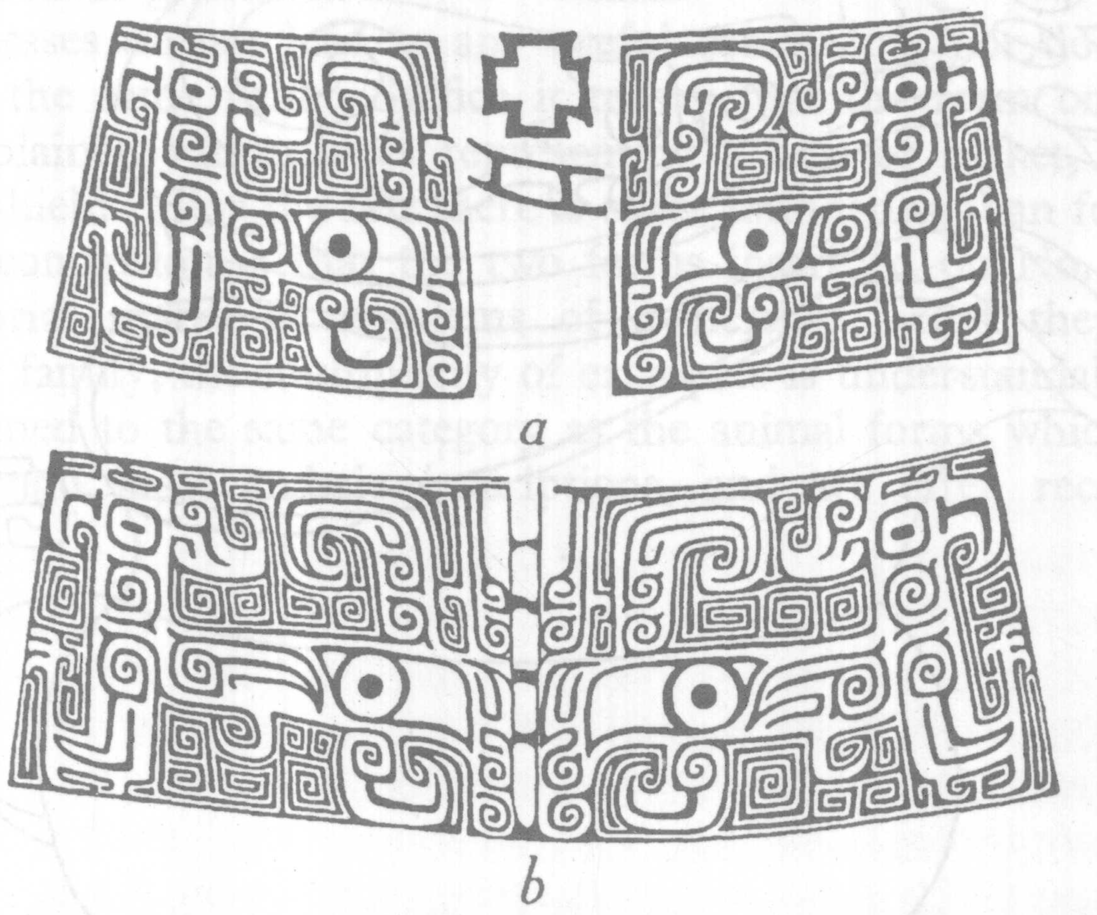


FIG. 9 Details of No. 8 Inscription included in *a* Actual size

as characteristic of "animal style" art, which, occurring among the most ancient Chinese bronzes, led me thirteen years ago to venture the theory that China may have contributed to the origins of the "animal style" (124, 12, 13). Since then data in support of the theory have multiplied, and they will be published in my forthcoming work on the ritual bronzes.

Fig. 9 offers also another demonstration of that freedom from the trammels of exact symmetry which already has been remarked as an enlivening quality (*v. sup.* p. 26). It is apparent not only when the two halves of each mask are compared, but also when each mask as a whole is compared with the other. During the First Phase the bronze casters had

not yet resorted to the labour-saving expedient of the die, which often caused later works to look mechanical.

Behind the handle is an inscription of two sharply defined characters, sunk below the surface of the narrow plain field which separates the two halves of the mask on that side (*v.* Fig. 9 *a*). Below these two is a space, which originally may have been occupied by one or two characters, and here some confused marks are visible, but they are too slight and indefinable for an attempt to have been made to copy them in Fig. 9. The first character, like a Geneva Cross, is a variant of a form which occurs frequently on the earliest inscribed bronzes. Among those who seek to explain it, some recognize the ground plan of an ancestral temple or of a tomb, some the picture of a ritual wine-vessel seen from the side, and some the picture of two pairs of bows. The truth being that no one knows for certain what it means, a safe name for it is *ya hsing* 亞形, "the form shaped like the character *ya*." As to the second character, it is generally said to be an archaic form of *chou* 舟, meaning "boat," a character often used for *chou* 周; but here again the significance is doubtful.

We are left, then, with very scant information obtainable from the inscription, which may be now incomplete. A latter part, if originally present, probably named the ancestor in whose honour the vessel was cast. Metal seems to have been scraped away below the existing characters, and perhaps for some reason a dedication was thus obliterated. The two characters suffice, however, to indicate an early stage of the First Phase. If we accept Karlgren's conclusion in his valuable survey that the *ya hsing* existed solely under the Shang-Yin and was obsolete under the Chou (*v.* 60, 21-23), the period is settled. But there remains the question whether the *ya hsing* really should be regarded as such a decisive criterion, and that would involve a longer discussion than can be attempted here. I merely remark that recent excavation at the Hsin Ts'un 辛村 site, near Hsün Hsien 濬縣, has brought to light a *yu* bearing an inscription of seven characters which include a *ya hsing* (101, 16). While evidently this was a cemetery of the Wei 衛 State, which was established at the beginning of the Chou period, the presence of some Shang-Yin remains can hardly be excluded (*v.* 126). Nor do the terms of the inscription on the *yu* indicate an unquestionable Chou date, though the balance of evidence from all sources favours that attribution.

NUMBER NINE A *kuang* 觥, inscribed First Phase Height, 6⅝ inches (16·8 cm.) Plate XIII

AMONG the Sung archæologists only one seems to have dissented from the general opinion that such vessels as this should be classified together with the ewers called *i* 匜. He was the anonymous author of an illustrated catalogue of bronzes probably compiled not long after 1092, the date of the oldest of the Sung illustrated catalogues now extant. Two vessels he names *ssŭ* 兕 *kuang*, and one simply *kuang* (6, II 8, 9; III 21, 27). Obviously the present woodcuts are not faithful pictures of the objects, yet they show enough for the first two to be recognized as belonging to the First Phase, while the third appears to be a ewer of the Third Phase. Of the last the author says that "although its shape does not conform strictly to the type of the foregoing drinking vessels, it too is a drinking vessel of the *kuang* class." Apart from this somewhat dubious woodcut, there happens to be no other vessel pictured in his book which could possibly be taken for a ewer, except a piece which bears an inscription dated A.D. 338, and is therefore irrelevant to a discussion concerned with archaic ritual vessels (6, IV 15).

In short, there is no sure evidence that this unnamed archæologist was more acute than his fellows to the extent of differentiating between a *kuang* and a ewer. From his note on the first example (which by the way has lost its cover, though he omits to remark the fact), he seems to have recognized the vessel as a *ssŭ kuang* through identifying it with that name in a passage of the *Shih ching*; for he quotes commentaries on the text. The name occurs four times in the *Shih ching* (74, IV 9, 233, 387, 606), and beyond doubt a goblet is meant in the first two passages, probably in the others also. Moreover, his identification seems to depend largely upon the tradition that the *kuang* was the largest of the goblets. It is said to have held five or seven *shêng* 升, whereas the *chüeh* 爵 held one, the *ku* 觚 two, the *chih* 觶 three, the *chio* 角 four, and the *chia* 斝 (mistakenly written *san* 散) five *shêng*. The unknown author notes that the capacity of his first example was three *shêng*, according to Han measure; the capacity of the second he omits; and for the third he gives it as five *shêng* according to Han measure. Indeed, this criterion of capacity is proved by our

archæological experience to be unsound as a basis for identification, since the sizes of known examples of the classes thus named vary widely. On the whole, the *chia* seem to have the greatest capacity, though large specimens of the so-called *kuang* are known.

Enough of the problem has been stated, if only in barest outline, to make us pause before accepting *kuang* as the ancient, distinctive name of the class exemplified by No. 9. Another point to be mentioned is that vessels of this kind do not strike one as suited to serve as goblets. They would be awkward to drink from; and some examples are partitioned inside into two chambers, and furnished with a ladle, giving the appearance of a container designed for the mixing of liquor, probably with water. Yet passages in the *Shih ching* indicate that the *ssŭ kuang* were used as goblets. Legge takes *ssŭ* to mean "rhinoceros" in deference to commentators who quote an ancient definition of *ssŭ* describing it as "a wild ox, with a single horn, dark in colour, and 1,000 catties in weight" (*v.* 3, X 16; 74, IV 9). But probably the word means no more than "bovine," as will be explained later, and therefore there is some justification for the cataloguers who enter under the heading *ssŭ kuang* certain bronze rhytons which had the ox-horn goblet for prototype (30, Metal Section, 50).

Wang Kuo-wei was the first to draw a clear distinction between the ewers (*i* 匜) and the vessels like No. 9 (119, 4-7). He passes in review some sixty bronzes published in catalogues under the name *i*. More than half are of the covered kind, and not one of these (with a single doubtful exception) is inscribed with the name *i*. The rest lack a cover and have the name *i* inscribed on them. He might well have remarked another point of difference, which is that the covered kind display the archaic style of design which I call the First Phase, while the remainder display Second or Third Phase characteristics. He concludes that the two groups are essentially apart, since the first is for holding wine, while the second, the true *i*, serves for bringing water to wash-basins. So far he is undoubtedly right; but I question whether he is fully justified in accepting the unknown Sung cataloguer's conclusion that the covered kind was anciently named *ssŭ kuang* or *kuang*. At all events, *kuang* may be used as a convenient term, until a better be found, in order to distinguish these ritual wine-vessels from the ewers. In general shape the latter look somewhat like the *kuang* without the cover, and loss of the cover from many examples of the former

no doubt encouraged the habitual failure to discriminate between these two essentially different classes.

When describing the covered class, which we have decided to call *kuang*, Wang Kuo-wei erroneously states that all the covers display an ox head. There is one example about which there can be no question; for the whole vessel is fashioned in the shape of a kneeling ox (77, XXXII 18). If an ox head were always present, it might help to justify an identification with the vessels called *ssŭ kuang* in the *Shih ching*; for the word *ssŭ* probably has no more specific meaning than "bovine." Yet the fact is that an ox head is a rarity. The cover, as well as the body, is often crowded with all kinds of animal forms, but Wang Kuo-wei clearly refers to the largest and most striking one which surmounts the spout. This is always a horned head, and sometimes it might be recognized as bovine. On the other hand, often it is joined to a body with two legs and a serpentine tail—the ubiquitous *k'uei* dragon. Such it is on No. 9, as may be seen in the outline drawing of the cover viewed from above (Fig. 10). Actually it appears less clearly defined than the drawing indicates, since its form in low relief lacks outline and merges with the contours of the cover. Beside it is

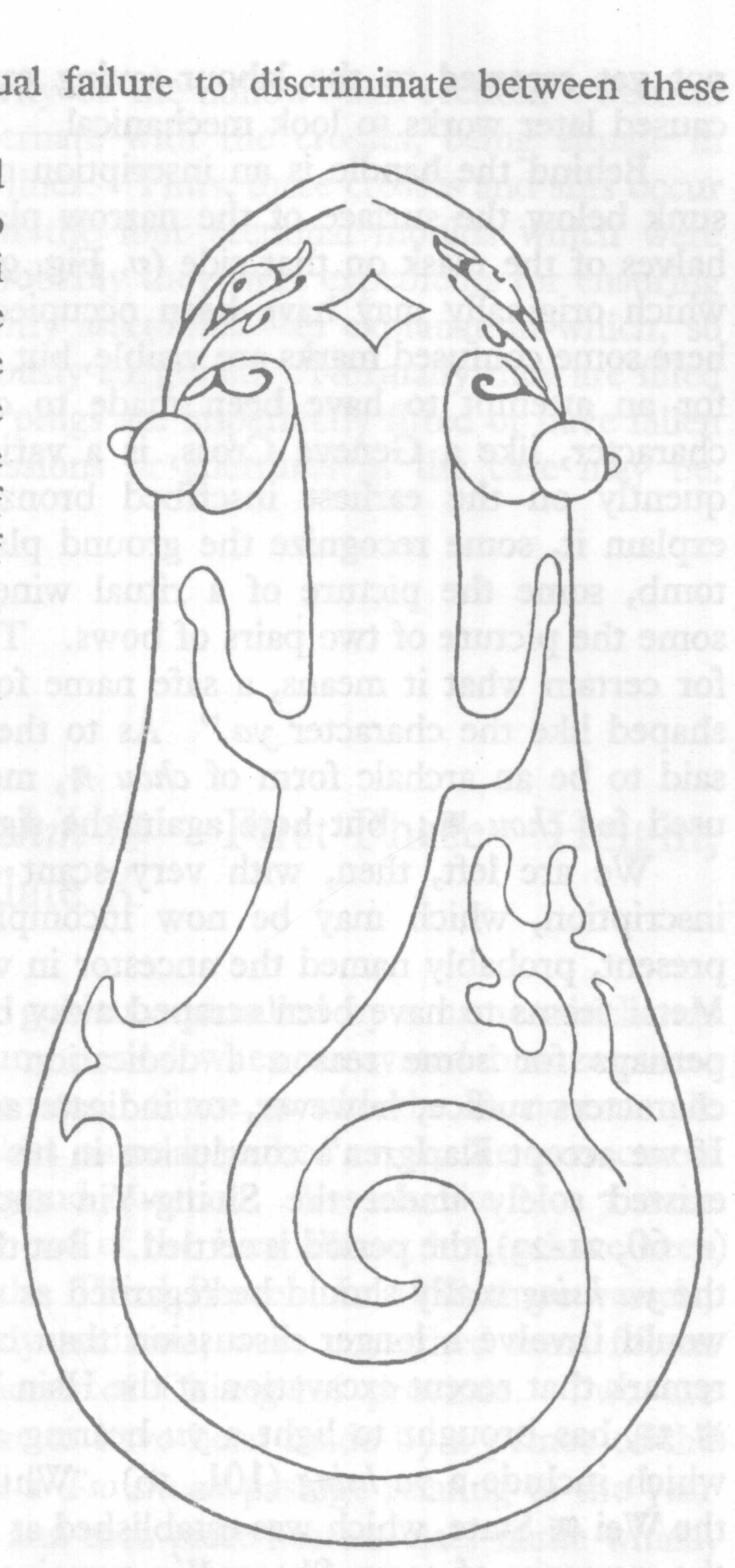


FIG. 10 Drawing of cover of No. 9 Slightly enlarged

another slightly raised form, so vague in shape as to be unrecognizable were there not available for comparison a remarkably close parallel to No. 9 which is represented in Fig. 11. This woodcut proves it to be one of the stock variants of the *k'uei* dragon motif, the type with open jaws

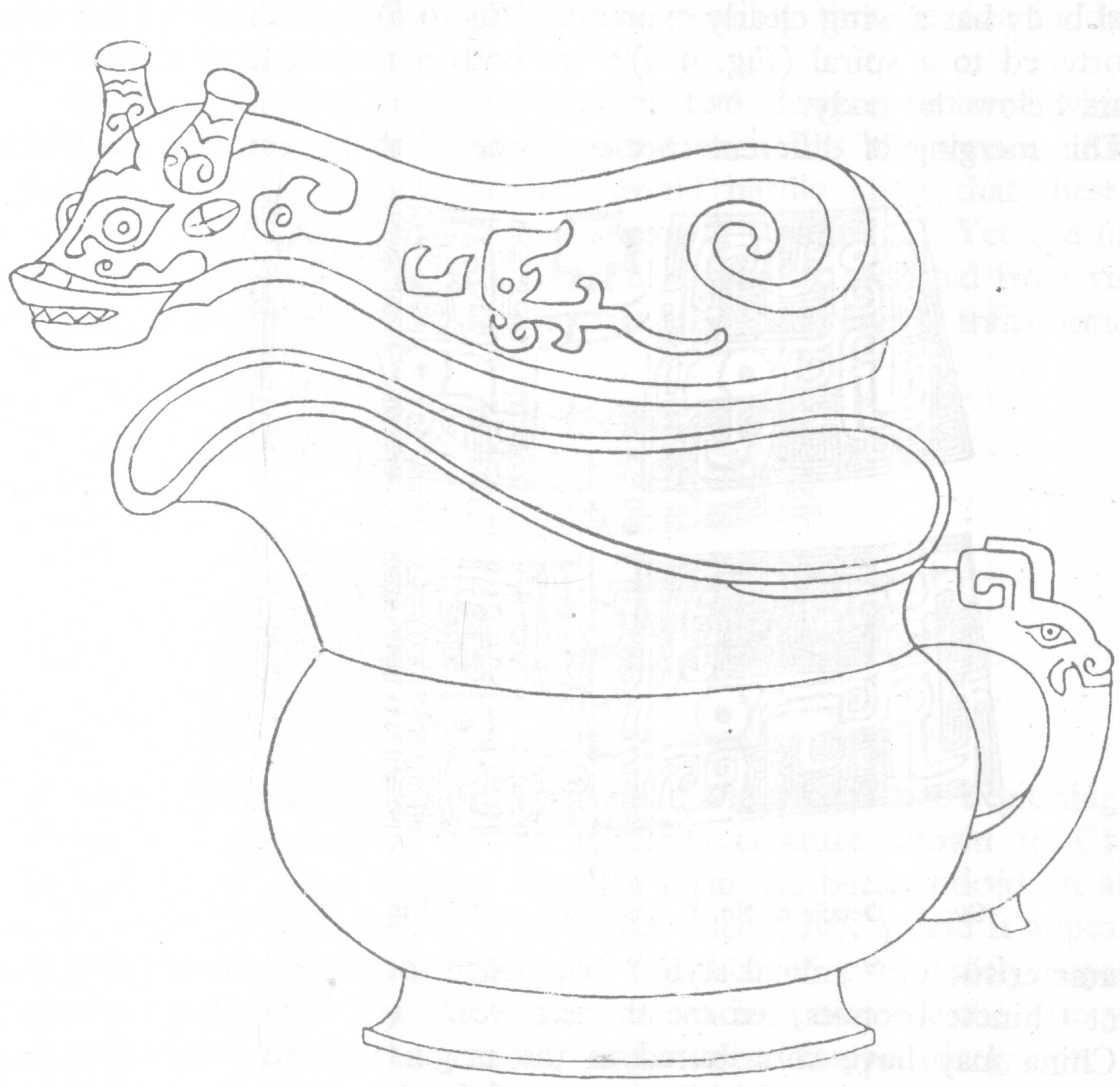


FIG. 11 Reproduction of woodcut in 25, III 10 Actual size

and a rounded horn contrasting here with flask-shaped horns of its larger companion. Another *kuang* similar to No. 9 is catalogued among the Sung imperial collection (118, XX 28).

In one of the songs of the *Shih ching* the association of the terms *ssŭ kuang* and *chin lei* 金罍 fortunately offers a clue to the debatable nature

of vessels denoted by the former term (74, IV 8, 9). The class called *lei* has been identified beyond doubt; its members are large and have a characteristic shape, though some examples are not easily distinguishable from certain of the *hu*. The proper function of the *lei* was to serve as containers from which wine was ladled or poured into the goblets. *Chin lei* means not a "gilded vase," as Legge translates, but a bronze *lei*; for the word *chin* in this connection anciently denoted the metal *par excellence*, which was bronze. In one verse of the song a lover draws wine from the *chin lei*; in the next he drinks it from the *ssŭ kuang*. Thus the Chinese instinct for literary balance is satisfied, the two being antithetically compared as to material, proportions and function. At least, that is the implication, if my argument be correct; for the first vessel is known to be of bronze, of large size and standard shape, and used for storage, while the second I take to be of different substance and small enough for use as a goblet. What, then, is the contrasted material signified by the word *ssŭ*? It is, I think, almost certainly horn.

What kind of beast was the *ssŭ* which provided the horn for the *kuang*? Laufer gives a lengthy dissertation to prove that *ssŭ* denoted none other than the single-horned rhinoceros; but many of his arguments are demolished by Lionel and H. A. Giles, who decide that it may have been a general term for several of the bovids (33; 70, 73-173). It may have embraced the rhinoceros also, and on this point the fact should be remembered that rhinoceros horn is suited to the fashioning of cups, as testified by numerous skilled examples known to have been carved during recent centuries. Moreover, the rhinoceros may have existed wild in ancient China, and undoubtedly it was known to the Chinese under the Chou; for certain bronzes of the archaic period bear pictograms representing it, and there is in a private collection in London a bronze axle-cap fitted with a pin having at one end a realistically modelled head of a double-horned rhinoceros. Therefore it cannot be denied that rhinoceros horn prototypes for bronzes like No. 9, though unlikely, are within the bounds of possibility. More plausible is the explanation that the *ssŭ* of *ssŭ kuang* means "bovine." An ox horn provides a goblet ready made. If this solution of the problem be the true one, as I believe it is, bronzes like No. 9 can hardly be identified with the *ssŭ kuang* in the ode cited above, nor in another ode of the *Shih ching* which mentions "curved *ssŭ kuang*" 兕觥其觩 together with certain

vessels for sacrificial rites. For some unexplained reason Legge omits to translate this line (74, IV 606). Elsewhere in the *Shih ching* the same word for "curved" is used to describe a horn (74, IV 605), and the likelihood seems to be that the primary meaning of the term *ssŭ kuang* was merely an ox horn goblet. In the *Shuo wên* the word *kuang*, written also 觵, is defined as "the horn of an ox (*ssŭ niu* 兕牛) which can be used for drinking" (49, IV B, 9).

The foregoing conclusions do not conflict with the supposition that the term was transferred to a bronze drinking vessel which retained some characteristics of a horn prototype. Kuo Pao-chün has an ingenious theory that the original *kuang* was an ox horn cut down its long axis in a horizontal direction (69, 692). Thus the horn was divided into two: a lower part which might serve as a wine container, and an upper part which might serve as a cover. Such a vessel would resemble in general shape the bronzes which we call *kuang*, and so justify this name as applied to them. Another evidential item is the tradition which associates the term *kuang* with the custom of exacting a penalty for certain delinquencies by demanding that the culprit should drain a bumper of wine. The idea was that a goblet so shaped, when thrust into a person's mouth, could overcome resistance.



FIG. 12 Inscription on base of No. 9

The inscription (Fig. 12) is inside the body of the vessel, sunk in the middle of the bottom. There is no inscription on the cover. On the left is an obvious picture of an arrow; on the right is a form which often occurs on bronzes and also in the Shang-Yin Oracular Sentences. The two may be equated with the characters *shih* 矢 and *chu* 宁, respectively, meaning "arrow" and "the space between an outer gate and the curtain-wall." But perhaps they do not stand here for these two words or names of like sound. This particular combination is found on at least four other ritual vessels (82, No. 2, 12; No. 6, 44; 116, I 38; 118, XV 9). The last two have in addition the characters Fu Ting 父丁, presumably the dedication to an ancestor. Perhaps, therefore, they and No. 9 belong to the same set, though this conjecture should not be given too much weight, because such a designation must have applied to countless ancestors, for reasons stated above (*v.* p. 23). Certainly the severely plain style of the last mentioned vessel, a *chia* 斝, matches that of No. 9, but the arrow inscribed

on it is drawn somewhat differently. It would indeed be an extraordinary coincidence if a vessel in the Sung imperial collection eight centuries ago were a companion to No. 9. The compilers of the famous catalogue, in which the *chia* is described, take the opportunity to make one of their imaginative identifications with historical personages. They surmise that the ancestor to whom the vessel is dedicated was none other than Ting Kung 丁公, the second prince of Ch'i 齊 who reigned from about 1077 to 1052 B.C., according to standard reckoning. Chu 宁, they suppose, was the name of his son or grandson.

Such guesses do not lead to any useful conclusion, nor do I propose to follow in the same vein. Suffice it to say that the form on the right has been explained variously as representing a case or casket, a flight of steps, and a shield. For the last there is surer foundation than for the rest. A plausible conclusion is that the two forms inscribed on No. 9 may be merely pictorial marks or emblems of ownership. Had they signified some clan or family, the multiplicity of examples is understandable. They may be assigned to the same category as the animal forms which occur in the briefest and most archaic inscriptions, and are often recognized as totems.

NUMBER TEN A rectangular *i* 方彝, inscribed First Phase Height, 7¼ inches (18·4 cm.) Plate XIV

AMONG recorded bronzes, vessels such as this are few in proportion to the examples of other ritual classes. For instance, only three appear in the famous catalogue of the Sung imperial collection. Two of these were not recognized as archaic vessels, though the woodcuts, however faulty in the representation of detail, clearly display a style of decoration which now is known to typify the early part of the First Phase (118,

XXVII 16, 17). The compilers erroneously ascribed the vessels to the Han period and called them *lien* 奩, a class which seems to have been used to contain mirrors and other toilet requisites. The third example, which lacks its cover, is entered under the name *i*, with the prefix "rectangular" (118, VIII 15). That is the classification followed here, though *i* is merely a general term for sacrificial vessels. No more specific designation is possible, because these casket-shaped vessels have not yet been identified with any class distinctively named in classical literature. Therefore we have no clue as to the use to which they were put; presumably it was to contain sacrificial offerings—food or drink.

In common with all the known examples of this class, the decorative design of No. 10 belongs to the early part of the First Phase. The main zone of the body has on each of the four sides a so-called *t'ao-t'ieh* mask composed of two *k'uei* dragons shown in profile, vertically placed, with heads pointing downwards. While the profile snouts of each dragon pair join to form the frontal snout of the mask, the curling tails simulate horns, and are incised with grooves, perhaps to stress their borrowed function. When compared, for instance, with the basically same motif on the rectangular *ting* (No. 1), some loss of the dragons' identity is apparent; for on No. 1 each dragon retains its several parts intact, but here it suffers mutilation in order to present a simpler type of mask. An ear is added behind each dragon's leg.

On each of the four sloping sides of the cover is a variant of the device. Again seen in profile, each dragon has its own flask-shaped horn, and the two horns provide a pair for the frontal mask, leaving the tails discrete and adorned merely with spirals. Following the habit of archaic design, these masks on the cover are upside-down, and so are the much simplified, incised masks on the knob which fittingly repeats the shape of the cover.

An effect of ungainly squareness is avoided by two expedients. The body is made to expand upwards, thus giving to its contour lines a slight obliquity which balances well the steeper slope of the cover. The other expedient is a median break on each side in the continuity of the hollow base, where two *k'uei* dragons are expressed in a cunning pattern of incised curls (Fig. 13). Instead of having their heads opposed in the median line of each side, as with the other animal figures, the dragons face the corners.

Thus diversity is achieved, and two contiguous heads at each corner combine to form one of another series of four masks.

We have noticed the skilful variation of the mask motif composed with paired dragons. There remains to be described the zone around the rim where paired tigers are the contributing elements—a rarity paralleled on an axe-head which was lent by the William Rockhill Nelson Gallery to

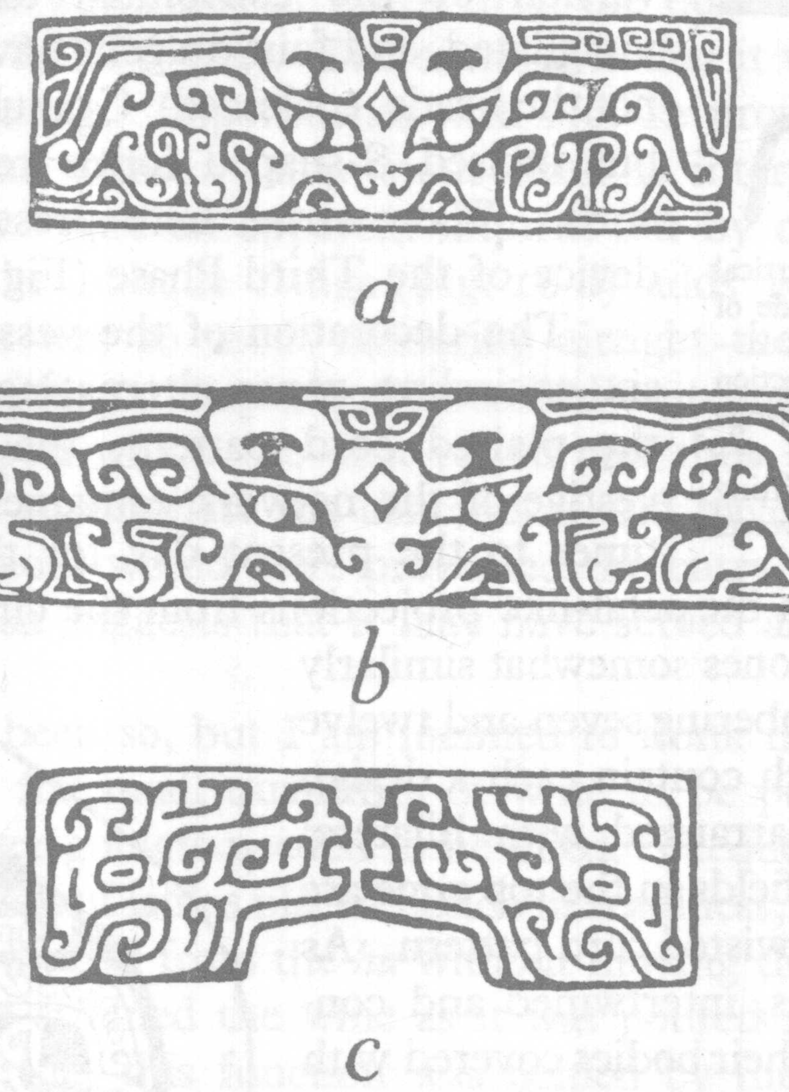


FIG. 13 Details of No. 10: *a* and *b*—on upper part of body *c*—on base Actual size

the recent International Exhibition of Chinese Art (No. 263). The decorative expedient of merging heads is not, of course, peculiar to China. Elsewhere examples are known of one head shared not only by two but by three and sometimes four animals arranged in a symmetric group. It occurs widely separated as to time and place; for instance, in Mycenæ, Etruria, Mesopotamia, North-West America and embellishments to Gothic architecture. So simple a device may have been conceived spontaneously by many craftsmen.

Inside both body and cover is a sunk inscription comprising two forms (Fig. 14). The upper form, of which the meaning is not known, has been discussed above (p. 32); the lower depicts a hand, and, when turned in this direction, it signifies the right hand. The latter may be equated with the word *yu*, "right," as deciphered in Fig. 14, on the evidence afforded by three large *ho* 盉, which, now in the collection of K. Nedzu, are said to have been excavated not long ago at the Shang-Yin site near An-yang. Each of these *ho* bears a single character behind the handle: one the character *chung* 中, "middle"; one a "right hand" pictogram similar to that on No. 10; and the third a pictogram of like form, but turned in the opposite direction, which is equivalent to *tso* 左, "left." The vessel inscribed with the last-mentioned pictogram was lent to the recent International Exhibition of Chinese Art (No. 320). These three inscriptions may indicate the respective positions occupied by the *ho* in ceremonies for which they were designed, and, if so, the one on No. 10 probably has a similar import.

□
右



FIG. 14 Inscription on cover of No. 10 and decipherment

This is one of many vessels of like shape which are said with plausibility to have been excavated recently at An-yang.

NUMBER ELEVEN A covered *kuei* 簋, uninscribed Transition between First and Second Phases Height, 8⅜ inches (21·3 cm.) Plate XV

THE decoration of this piece is simple; apart from the horizontal fluting of the body, it is confined to two encircling zones and the handles. Little need be said about the handles: each ends above in a

cervine head, slightly modelled in a somewhat perfunctory manner, and below there are vestiges of the bird design which would hardly be recognizable as such without turning to prototypes for comparison. Each of the two figured zones, one on the cover and the other on the body, is occupied by two pairs of horned *k'uei* dragons symmetrically opposed head to head. Between the everted heads of each pair is a form of doubtful significance which often occurs in this median position; sometimes it is replaced by an animal mask in partly modelled relief. The device is graceful, as may be seen in the accompanying detailed drawing (Fig. 15), yet it lacks the accomplished craftsmanship typical of early First Phase works, and there is reason to believe that its admirable qualities were relics of an old tradition. Three inadequate legs, projecting from the splayed base of the vessel, are

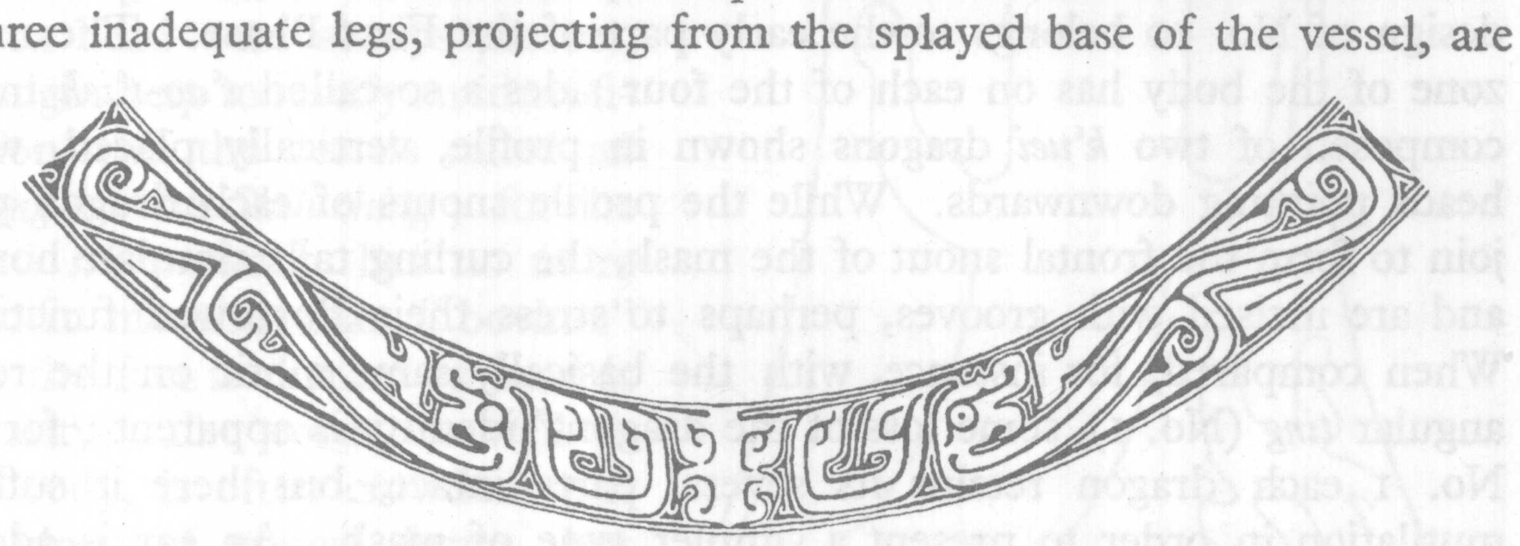


FIG. 15 Detail on body of No. 11 Half actual size

so crude and devoid of invention that they seem in themselves to proclaim a new departure in bronze design—a hesitant, experimental stage before craftsmen had evolved a satisfying formula to express an unaccustomed addition. *Kuei* displaying characteristic features of the First Phase are not known to have legs, while typical Second Phase *kuei* which have them show a further stage of development, the legs by then having assumed proportions more in keeping with the general structure of the vessels, and being generally adorned with animal motifs. In short, the Cull *kuei* may reasonably be deemed an example of the transition from the First to the Second Phase. It is said to have come from the cemetery at Hsin Ts'un, about 2 miles west of Hsün Hsien station on the P'ing-Han Railway, where bronzes have been found exhibiting a succession of styles, starting from the beginning of the Chou period (*v.* 126).

Having recognized this piece as one which exhibits vestiges of the

earlier stylistic phase, comparison with an archetype is interesting. Among the bronzes formerly in the Manchu imperial collection kept in Jehol is the *Yü chêng Wei Kuei* 御正衛簋 (*v.* 55, 57, 58). It bears an inscription which, though containing no historical clue to the date, displays a style of script consistent with an early Chou attribution. Kuo Mo-jo assigns it to the reign of King Ch'êng, the second Chou sovereign (65, 25). Here there is a similar zone decorated with curved dragons like those on the Cull *kuei*; the handles are much the same, but cover, legs and horizontal fluting are absent. The spirals covering the field around the dragons claim first attention, because, being elaborated with meticulous nicety according to archaic habit, they contrast with that simplified and somewhat negligent mode of filling the background illustrated in Fig. 15. In the latter, then, may be witnessed one of the most constant features of the First Phase on the road to extinction; for blank backgrounds are typical of the Second Phase, and the abbreviated versions of spirals on the Cull piece show that it was made at a time when craftsmen were beginning to lose their *horror vacui*, perhaps not so much because taste was changing as from decadence of technique.

The question arises whether the horizontal fluting really was, like the legs, a new invention marking the advent of the new style, as Karlgren states (59, 2; 60, 145). Something much like it occurs among finds of Black Pottery in Shan-tung, and therefore its presence here may be an instance of reversion to a type which had long been neglected. But possibly it came from abroad. Rhytons, jugs and vases from ancient Persia often display it, and that is a fact which testifies to its prevalence in Central Asia.

So far as the published drawing allows one to judge, a *kuei*, formerly in the Manchu imperial collection kept at Moukden, seems to resemble the piece under discussion, except that the background for the dragons is perfectly plain (5, XII, 46). Consistently with the foregoing argument, it should be assigned to a slightly later stage than the Cull *kuei*, and so to the Second Phase. On the other hand, there is a *kuei* from the same collection which might be slightly earlier than the Cull piece (5, XII, 36). It has similar primitive legs (four in number) and no fluting, while the zones encircling body and cover are filled around the dragons with more elaborate spirals.

The closest match is found in the Sung imperial collection, though

comparison is confined to the body, since the cover is missing. Again we have to rely on a catalogue illustration which may not be entirely faithful, the bronze itself having disappeared (118, XVII, 16). Fortunately there is an inscription, comprising 47 characters, which offers evidence as to date. From the content and the style of the script Kuo Mo-jo assigns it to the reign of King Kung (65, 76; 66, fig. 87, f. 60), which, according to the generally accepted chronology, lasted from 946 to 935 B.C. We may conclude with a fair amount of conviction that the Cull *kuei* was made about this time.

NUMBER TWELVE The *Huang-ch'ih Hu* 黃池壺, a pair, inscribed Third Phase Height of each, 19 inches (48·3 cm.) Plates XVI and XVII

THESE two wine-containers are so closely matched that a photograph of one represents the other equally well. They can hardly be described as covered, because the movable part at the top is merely a circlet which leaves the vessel open. As may be understood on turning to the two plates and Fig. 16, the central aperture surrounded by this circlet is edged by a horizontal flange (Fig. 16 *b*), evidently intended to support a cover. Comparison with certain other *hu*, to be noticed presently, leads to the conclusion that probably the lost cover was a flat disk surmounted with the figure of a bird which served the dual function of an ornamental finial and the means for lifting the disk.

The circlet is seen to have eight out-curved projections, shaped like the petals of a flower, uniform in size and design. On Plate XVII a photograph taken from above shows three of the petal-shaped projections and their decoration of dragons in slightly modelled relief. The two dragons' sharing one head manifests survival of a device which we have previously

observed on examples of the First Phase (*v. sup.* pp. 2, 41). Here it appears in a form characteristic of the Third Phase: granulations are present on the convoluted dragons which are embellished with sundry curls, and a blending of the two heads is signified with a collar around the common neck. On the under side of each projection is a different version of the convoluted dragon motif. It is intagliated, and four dragons have their hinder parts, not the heads, coalesced. Granulations again appear, but incised S-shaped forms replace the modelled curls. Wavy striæ, here present, are a favourite device of the Third Phase (Fig. 17).

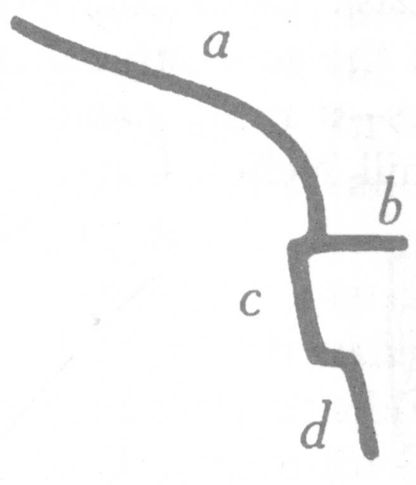


FIG. 16 Diagram of vertical section through side of circlet of No. 12: *a*—petal shaped projection *b*—horizontal flange *c*—inscribed zone *d*—oblique flange fitting within mouth of vessel

The decoration of the vessel's body comprises six encircling zones alternating with five bands of the plaited cord pattern, the latter doubtless a vestige of the network container used from earliest times to the present day for the carrying of pots. Harmonizing with the petal-like projections from the circlet there are in the top and bottom zones somewhat similarly shaped fields, numbering seven and twelve respectively, which contain each a design of curled forms arranged with bilateral symmetry. The fields in the top zone are bordered with a twisted cord pattern. As to the other zones, intertwined and convoluted dragons, their bodies covered with spiral designs, granulations and striæ, and augmented with curled appendages, provide the ornament. Details of the two middle zones appear nearly actual size on Plate XVII. In the tallest zone, near the base, four complicated masks are contrived—clearly vestiges of the archaic *t'ao-t'ieh*.

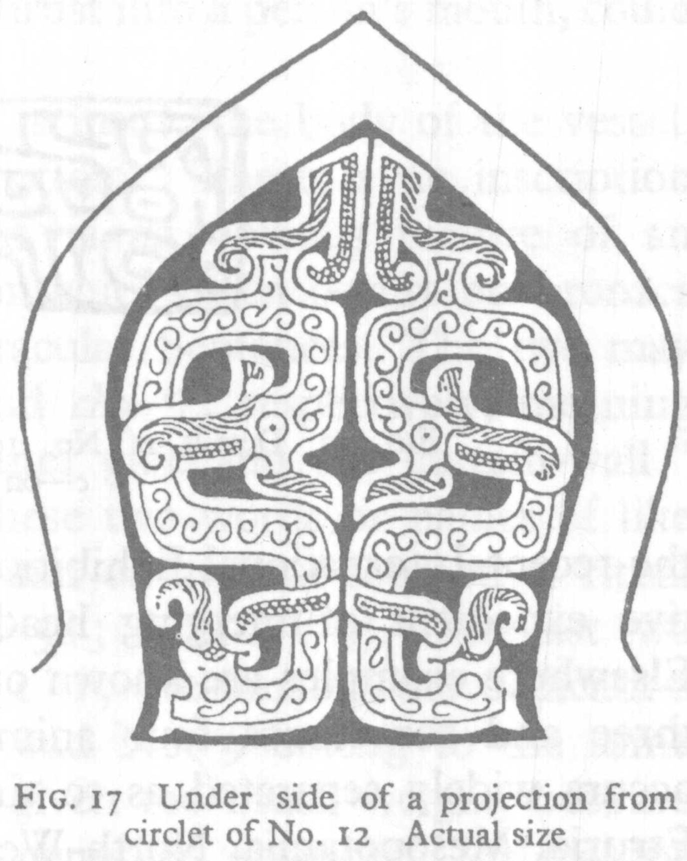


FIG. 17 Under side of a projection from circlet of No. 12 Actual size

A pair of beasts, each 6 inches long, provides the handles. In the large scale reproduction of one on Plate XVII may be seen repetitions of the

spiral designs, granulations and striæ previously noticed on the vessel's body. Indeed, the beast itself seems to be an embodiment of the basic element which occurs multiplied in the medley of the zones. Its head, for instance, is nearly matched in the upper part of the detail on Plate XVII. This basic element in the zone designs has been described above as a dragon, and evidently it is a descendant of the so-called *k'uei lung*, ubiquitous in the First Phase, which has changed with the times. Another relic of an earlier age is the scale pattern on the beast's tail. Probably foreign influence has played a part in the fashioning of these handles, as will be explained presently.

Before passing to the inscription, let us search for analogies to No. 12. As to the circlet, striking parallels are afforded by two pairs of vessels which were excavated in 1935 near Chi Hsien 汲縣 in northern Ho-nan, some 52 miles south-west of An-yang. This is, in fact, the reputed provenance of No. 12; for when the find was made about eleven years ago, Wei-hui 衛輝 was said to be the site, and that was the name of the former prefecture which included the district city of Chi. These vessels from Chi Hsien are especially illuminating because one of each pair still retains the disk which fits into the top of the circlet, and on each disk is the figure of a bird—one complete with wings outstretched, the other lacking its wings. Unfortunately no report of the excavations in 1935 at Chi Hsien has yet been published; but Ch'ên Mêng-chia quotes from a manuscript account written by Kuo Pao-chün 郭寶鈞, and gives a photograph of one vase from each pair (21, 209, 210, figs. 4, 5). These data make it clear that the *hu* from Chi Hsien differ from No. 12 in several minor particulars. Their petal-like projections, eight in one pair and six in the other, are pierced; rings pendant from animal masks serve as handles; decoration in the horizontal zones is less elaborate and the rope pattern is absent; bodies are spindle-shaped and the bronzes are not inscribed.

Another pair of *hu* of a type similar to those found at Chi Hsien is reported by Bishop White to have come from the same group of tombs at Chin Ts'un 金村 as the well-known Piao 驫 Bells. Again there is the circlet with six open-work petal-shaped projections, and again horizontal decorated zones which, however, differ as to detail, being filled mainly with the "feather and curl" design. The inscription of 47 characters indicates the circumstances of the casting in a manner which doubtless was perfectly

explicit at the time; but now the clues are lost. As to the date, we can merely guess to whose reign the "tenth year" refers. Bishop White, through a slip, reads "tenth year of the King," and so assumes that the allusion is to a Chou king, but actually there is no mention of this title. On the contrary, the terms of the inscription seem to point to some feudal ruler rather than the "Son of Heaven." The inscription contains a name which some identify with a place in Shan-hsi belonging to the Han 韓 State. That gives a hint as to the historical setting, and so does the locality of discovery, assuming that the latter was reported correctly (*v.* 65, 239, 240; 122, 43-46, 123, fig. 253, pl. 184).

While all the *hu* already mentioned are about the same size, there is another pair analogous to No. 12 measuring twice the height. It is part of the famous find at Hsin-chêng 新鄭 where in 1923 more than a hundred bronze vessels were dug up either whole or broken. Here the petalled rim that fits into the mouth of the vessel cannot be termed a circlet because it is rectangular with its corners rounded; and the plate closing the aperture and acting as cover is of like shape. Upon the plate stands the figure of a crane with outstretched wings. Two series, each of ten open-work and petal-shaped projections, arise from the rim, one inside the other. Another feature in common with No. 12 is the provision as handles of a pair of dragons with heads turned back. The decoration on the vessel's body is not, however, arranged in horizontal zones (*v.* 100, 100-108). On account of their provenance, these *hu* may be regarded as products of the Chêng 鄭 State.

A fourth parallel to the upper part of No. 12 is provided by a *hu* in the Eumorfopoulos collection. It has a circlet with six open-work and petal-shaped projections, and the disk that closes the vessel is surmounted with a stem from the top of which four solid leaves radiate like a calyx. The body is decorated with inlaid gold and a black substance in horizontal zones, and the handles are rings pendant from animal masks (*v.* 127, I A, 33).

Why was the cover so curiously made in two separate pieces? Probably Kuo Pao-chün and Ch'ên Mêng-chia are right in their surmise that it had to do with the cloth used to cover wine vessels (21, 213, 214). In the ritual classics there are several allusions to cloth covers; one has been quoted already (*v. sup.* p. 7). Another passage in the *Chou li* says: "The Coverers (*mi-jên* 冪人) are charged with the provision of cloth covers.

When sacrifices are offered, they cover the eight wine-vessels (*tsun* 尊) with cloths of plain fabric; they cover the six sacral vessels (*i* 彝) with figured cloths. All the cloths used by the king are patterned (in white and black)." There is a comment by K'ung Ying-ta to the effect that, besides serving as covers, the cloths are used to wipe the vessels clean (*v.* 1, VI 5, 6). In the *I li* a coarse linen, called *ch'i* 綌, is mentioned as the stuff used to cover sacrificial vessels. It was made of fibres from the dolichos creeper, called *ko* 葛 in Chinese (*v.* 8, XIV 3, 4). The surmise is that it was used not only in lieu of other covering. Experiments with No. 12 prove that the circlet can be pressed home while a fairly stout cloth is interposed between it and the vessel's rim. And an apparent imprint left by coarse fabric on a corroded patch of the oblique flange (Fig. 16 *d*) adds plausibility to the surmise that a cloth was so used, rendering airtight the insertion of the circlet and also providing a diaphragm stretched taut under the horizontal flange (Fig. 16 *b*) upon which the disk rested and thus sealed the vessel. All that was needed to ventilate the contents would have been removal of the disk, when the cloth would have prevented the entry of flies and other foreign bodies. Ch'ên suggests that it may have served also to strain wine poured from the *hu*.

That may have been so, but I am inclined to think that these *hu* were too large and heavy for small quantities of wine to be poured from them conveniently whenever goblets needed to be filled. Frequently in the ritual classics there is mention of ladles placed beside in readiness, and the inference is that the wine was dipped from the *hu* without moving them. In that case the cloth might have strained the wine as it was poured in, and I venture to advance a theory that this function was helped by the presence of the petal-shaped projections. Now, the traditional mode of straining wine was to let it soak through a bundle of *mao* 茅 grass, which with its numerous awns and fine hairs acted as a coarse filter. There is a passage of the *Tso Commentary* reporting a dialogue when the Prince of Ch'i 齊 with his allies attacked the State of Ch'u 楚 in 656 B.C. To an envoy from the invaded State the Prince tried to justify the aggression by posing as champion of the "Son of Heaven." Alleging neglect of certain feudal obligations, one of his complaints was: "Your tribute of bundles of *mao* grass not having been rendered, the king's sacrifices are not supplied with it, and there is nothing with which to filter the wine. I am here to inquire into that" (*cf.* 74, V

139, 140). Again this grass is named as a filter for wine in a passage of the *Li chi* which is full of technical terms difficult to understand. Chêng Hsüan's comment leaves no doubt that in his opinion the *mao* was used actually as a filter (9, XXVI 23). I mention it, because K'ung Ying-ta gives a note on the above-quoted passage in the *Tso Commentary* suggesting that the grass had a different significance. When a sacrificial libation poured upon a bundle had seeped away, it was supposed, he says, to have been drunk by the spirits (109, XII 11). My hypothesis is that the petal-shaped projections on the circlet may have held in place stalks of the grass heaped criss-cross between and upon them, and then the linen mesh would have served as a secondary strainer to stop the finer impurities.

Against this filtration theory is the existence of vessels with ordinary closed covers which are surmounted with a ring of the petal-shaped projections. Moreover, some of them belong to the Second Phase, whereas, so far as I know, all the open examples belong to the Third Phase. In view of that, an argument that the petals were devised for a utilitarian as well as an ornamental purpose and survived merely for appearance sake could hardly be upheld. Second Phase examples with the closed cover include the *Tsêng Po Ch'i Hu* 曾伯陭壺 which was lent by the Chinese Government to the International Exhibition of Chinese Art (No. 71). Its inscription of 41 characters gives no definite clue to the period which otherwise may be assessed on the style of the script and the design. Several Second Phase examples and at least three of the Third Phase come from the former Manchu imperial collection (*v.* 5, VIII 35, 43, 47; 77, XIX 6, 26, 38).

In our search for analogies to No. 12 so far we have been concerned mainly with the peculiarities of the cover and the arrangement of the decoration in horizontal zones. The latter feature and also the plaited cord pattern occur on a *hu* among the objects found in 1923 at Li-yü Ts'un 李峪村, some 45 miles south-east of Ta-t'ung 大同 in northern Shan-hsi (*v.* 96, 18). Unfortunately absence of a cover, probably lost, prevents comparison in that respect; but the decorative designs within the zones are remarkably like the corresponding designs on No. 12. The only available photograph fails to show clearly the remains of the handles which possibly resembled those on No. 12. These handles in the form of beasts, the heads regardant, have many parallels. Each of the afore-mentioned *hu* from Hsin-chêng has two such dragons as handles, but with elaborate horns,

besides four somewhat similar dragons decorating the vessel's belly. Another pair of *hu* among the same group also has the dragon handles (**100**, 95-108). Some 215 miles south-east of Hsin-chêng is the city of Shou 壽 in northern An-hui, the locality of a famous find made about 1931. A still larger pair of wine-vessels, the *Tsêng Chi Wu-hsü Hu* 曾姬無卹壺, over 30 inches in height, was dug up there. Each bears an inscription of 39 characters containing the statement that the vessels were cast "in the prince's twenty-sixth year" (*v.* **53**, 104, 105). There are reasons for believing the reign indicated to be that of Prince Hsüan 宣 of Ch'u, and accordingly the date is 344 B.C. The point to emphasize is that the two beasts serving as handles, though crudely fashioned, are undoubtedly more feline than dragon-like. The same remark applies to a number of other examples, all apparently of the Third Phase (*v.* **5**, VIII 45; **10**, VIII 33; **112**, pl. 78).

This leads to the statement of my belief that the idea of these handles was derived from abroad. A notable Western example is a silver amphora excavated in 1925 from a tomb near the village of Duvanlii, about 60 miles south-east of Sofia. The vase, just under 11 inches high, has a body with typical Greek ornament and two handles in the shape of a pair of winged lions with ibex-like horns. It is, however, inexact to call them both handles, because only one served solely as such; the other animal has a horizontal spout in the middle of its back connecting through its hollow hind quarters with an aperture in the side of the vase. B. Filow dates the piece to the first half of the fifth century B.C. (*v.* **31**). The type must have been a popular one, since it is represented several times in the frieze on the stairway leading to the Hall of Darius at Persepolis, the excavation of which, under the direction of E. Herzfeld, was begun in 1931 by an expedition from the University of Chicago Oriental Institute. The reliefs were sculptured during the reign of Xerxes (485-465 B.C.). Excellent photographs appeared in the *Illustrated London News* of 1st April, 1933, showing in the hands of Armenian and Syrian tribute bearers vessels like the Duvanlii amphora, except that their winged lions are hornless. There must surely have been some affinity between this type and the contemporary Chinese vases such as No. 12 and its analogies. The essential feature of this kind of handle is that the four feet of the animal are planted on the side of the vessel while its body forms the loop, the head being turned round to look backwards

over its shoulders. Among the most archaic Chinese bronzes the arched animal as a handle often occurs, notable examples being the three Nedzu *ho*, one of which was exhibited in the International Exhibition of Chinese Art (No. 320). Such have the head facing outwards, but the beast's belly, not the back, forms the convexity of the arch upon which the limbs, if represented at all, are doubled up and merge with the rounded contour. The opposite device, as displayed in No. 12, seems to have appeared in China about the beginning of the fifth century B.C., just at the time when it was popular in the West. Perhaps the new idea gained acceptance gradually; at first the distinctive pose only was adopted, while the species of the animal was given traditional Chinese guise. We have noticed that the handles of No. 12 are modelled versions of the dragon motif on the body of the vessel, and that this motif is a descendant of the archaic *k'uei lung*. In time the beast became more feline, imitating Western models, a stage that may be recognized in the *hu* found at Shou Hsien. I have not seen a Chinese counterpart to the spout modification, but a vase is recorded which has an ordinary spout and for handle a realistic feline figure, presumably a tiger, with head twisted round to the back (**50**, III 14). This figure differs little from the pair forming the handles of a gold bowl in the Hermitage, said to have been found in western Siberia early in the eighteenth century (**99**, fig. 19, pl. 6). Apparently Borovka regards the bowl as a product of Siberia (**13**, 55, pl. 58); but a Persian provenance seems likely: for one reason, the horizontal fluting of the bowl was a favourite device in ancient Persia (*v. sup.* p. 44).

Some bells are said to have been found together with No. 12 near Wei-hui, and the closeness of their resemblance to the *hu* in both decorative design and patina lends credibility to the statement. Of the four known to me, one belongs to the Vereeniging van Vrienden der Aziatische Kunst in Amsterdam (*v.* **125**, 12); another in the Stoclet collection was shown in the International Exhibition of Chinese Art (No. 181); another is in the Winthrop collection (*v.* **112**, pls. 99, 100); the fourth, in the Berlin State Museum, is so corroded that much of the ornament is obliterated, yet enough remains for it to be grouped with the others, as may be seen from the photograph in Kümmel's *Chinesische Bronzen* (pl. 17). The foregoing are noted in order of size, the largest being first: it is just over 23 inches high, and the smallest is 14 inches. Between the first three the differences in height are from 2 to 2½ inches; between the third and the last the difference

is about double that amount. A reasonable conclusion is, therefore, that they belonged to a gradated set or chime, and that there must have been a bell intermediate in size between the last two on the list. How many more originally went to complete the set cannot be stated, because the rules governing sets of bells are imperfectly known. Apart from others that may come to light, these four sufficiently testify to the magnificence of the ritual array of which they and the pair of *hu* probably formed part; for in excellence of design and craftsmanship the bells fully equal the *hu*. In the Östasiatiska Samlingarna, Stockholm, there is a bell which has so many features displayed by the group just described that surely it must have come from the same workshop (*v.* **112**, pl. 101). Some forty bells are said to have been found during the summer of this year in the Chi Hsien locality, the reputed provenance of No. 12. At least five of them, judged by photographs sent to me, are uniform in their decorative design which is like that of the four bells noticed above as associated with No. 12, but the designs are not so closely matched that the two groups may be assigned to the same set.

The foregoing survey establishes the fact that No. 12 has much in common with a number of bronzes, of which all, except the one, have been found in Chin territory or near thereto. The region thus indicated was the centre of ancient China, lying north and south of the Yellow River's course as it flowed eastward through Shan-hsi, Ho-nan and Ho-pei. The pair from Shou Hsien is the exception, but if its origin had been the Chêng State, as there is reason to suppose, it may rightly be included in this group (*v.* pp. 51, 71). Hitherto the means of dating the group with finality have been lacking: estimates range from the sixth century to the third. Even when on surer grounds the pair of *hu* from Shou Hsien can be assigned to 344 B.C., the most intriguing part of the problem is not much nearer solution; for this pair displays only one of the group's characteristics, and that at a late stage of evolution (*v. sup.* pp. 51, 52). Students of Chinese bronzes seek especially to authenticate the beginnings of the Third Phase. I claim for No. 12 that it provides a new criterion: it has full measure of the group's characteristics, and allusions in its inscription fix not only the oldest definite date so far known for any member of the group, but indications of locality as well.

Considering the importance of this inscription, the length of time that elapsed before attention was paid to it is astonishing. Since the pair came

into the market after its discovery some eleven years ago, it has passed through many hands, and one vessel was included (No. 133) in the International Exhibition of Chinese Art; yet not until 1937 in the *Burlington Magazine* was a study of the inscription published (125). That attempt was merely tentative, and it was also incomplete because of my failure to decipher one of the characters. Nevertheless, it did establish the date, the argument being based mainly on the presence of the name Huang-ch'ih, the place of a famous assembly of feudal rulers, together with the name of one who is known to have played a leading part in that event. For an understanding of these allusions, some historical account is necessary.

First a note on the locality of Huang-ch'ih is appropriate. According to indications given in the *Shui ching chu* 水經注, this place lay near the junction of the river called Huang Shui 黃水 (or Huang Kou 黃溝) with the southern part of the River Chi 濟. A canal, dug by the Prince of Wu, joined the Chi to the I 沂 River, an affluent of the River Ssŭ 泗, thus linking the Sung and Lu States (*v.* **123**, IV, maps South 4, West 1 and 2; South 5, Middle). These water communications are important, because they partly explain why the Prince of Wu appointed this place for the Conference. He could transport his army thither in fighting boats, as was his accustomed manner of campaigning. Another reason for the choice was its position in the very centre of China. At the time of the Conference, Huang-ch'ih lay within Wei 衛 territory. Afterwards it changed hands several times: Sung 宋 captured it from Han 韓 in 357 B.C., and two years later it was invaded by Wei 魏 and subsequently recovered by Sung (**19**, V 204, 153). Apart from the Conference, Huang-ch'ih appears in the pages of history only when these events are recorded. In terms of present-day geography, the site is 2 to 3 miles south of Fêng-ch'iu 封邱 and about 9 north of K'ai-fêng 開封, the capital of Ho-nan. The Yellow River now runs between these two places, just south of the ancient site; but in the fifth century B.C. its course was some 30 miles further north.

The assembly of feudal rulers at Huang-ch'ih in 482 B.C. marked the triumphal climax of a hundred years of struggle during which Wu rose from obscurity to be the foremost power in China. Until 601 Wu had been of so little consequence that not even its name is mentioned in the *Tso chuan*. An entry relating to that year states that Ch'u concluded a covenant with Wu and Yüeh (**74**, V 301, 302). Some time before that Ch'u had extended its

sway eastward to the sea, and these were two of the coastal tribes. Occupying the region of the Yang-tzŭ delta, Wu lay outside the pale of civilized China both geographically and culturally. With their short hair, tattooed bodies and diet of fish and rice, its inhabitants differed signally from the people of the Central States who deemed them barbarians. Perhaps the flattering notion that the ruling family could trace descent from the royal House of Chou was a fiction started or at least fostered to secure Wu as an ally. By the end of the sixth century B.C. the State had become one of the largest in China. Its eastern frontier was the sea-coast including the whole of present Chiang-su and northern Chê-chiang as far south as the city of Hang-chou. On the west it occupied eastern and southern An-hui and northern Chiang-hsi. The Yang-tzŭ separated it from the Ch'u State along a stretch of some 360 miles westward from the site of Nanking. South-east of it lay another hostile neighbour, the State of Yüeh. The first step in the acquisition of this large territory is chronicled in the *Ch'un ch'iu* with a brief announcement, relating to 584 B.C., that Wu invaded T'an 郯 and entered Chou-lai 州來 (74, V 361, 362); not before this does the name Wu appear in the text, and its absence is significant. T'an was a small State about 30 miles south of the present Lin-i 臨沂 (formerly I-chou 沂州) in the extreme south of Shan-tung; Chou-lai was a place of strategic importance on the Huai River some 10 miles north of Shou Hsien in An-hui. Both owed allegiance to Ch'u, and so these aggressions meant that Wu repudiated Ch'u suzerainty, thrusting itself into the affairs of the Central States as an independent power. The ruler of Wu further signified his intentions by assuming the royal title of *wang* 王 to match that of the ruler of Ch'u.

At this time the dominant States in China were four—Chin 晉, Ch'u, Ch'i and Ch'in 秦. Ch'i had passed its zenith, Ch'in was at the beginning of its rise, and the other two had reached a stage when they were equally matched in the fight for supremacy. Chin, looking for an ally to turn the balance in its favour, welcomed a proposal made by a Ch'u noble, named Wu-ch'ên 巫臣, who in 589 had fled to Chin with a lady ardently desired by both his former prince and a fellow official. The amorous adventures of Hsia Chi 夏姬, daughter of the ruler of Chêng, had been many before her fascinations caused Wu-ch'ên to desert his country, and so indirectly helped to start the barbarian ruler of Wu on his career of conquest (*v.* 74, V 341, 342, 347, 348, 362, 364). Wu-ch'ên proposed himself as leader of a

mission to train the Wu army in chariot fighting and other methods of warfare practised by the Central States. He was moved to make this request by the news that his relatives in Ch'u had been put to death by two of his former associates, the general whom he had robbed of Hsia Chi and another general who bore him a grudge. The outcome of the mission fulfilled Wu-ch'ên's scheme for revenge, and enlisted the ally needed by Chin. Attacks on the eastern borders of Ch'u, such as those at T'an and Chou-lai, diverted Ch'u troops from the Chin front, and Wu-ch'ên had the satisfaction of seeing the two hated generals harassed ceaselessly by urgent calls summoning them from one front to the other.

Through Wu's intervention, Chin gained successes in the struggle with Ch'u, but its fighting powers were lessened by internal strife. During the seventh century some of the enfeoffed families grew almost independent of their overlord, intriguing and quarrelling among themselves for the lead. The Chao family attained it towards the end of the century, and for more than twenty years its head, Chao Tun 盾, dominated the conduct of affairs in the State, acting as a sort of prime minister to Duke Ling 靈, whom he often had to rebuke for his extravagance and brutality. A favourite pastime of the Duke was to shoot from a tower at passers-by with his cross-bow and watch them dodge the pellets; one day he went so far as to kill his cook for spoiling a dish of bear's paws. Knowing that Chao Tun was aware of the crime, he ordered a man to stab him, but the intended assassin preferred to commit suicide. Then the Duke resorted to the traditional expedient of arranging for the death of the victim at a feast held in his honour. This time Chao Tun was saved by a servant from the Duke's kitchen who first killed a huge dog set to attack the guest and then prevented some hidden soldiers from springing out upon him. Chao Tun recognized his deliverer as one whom he had saved from starvation years before. Obliged to hide for a time, he resumed office after his cousin had assassinated the Duke in 607 B.C. An able administrator, Chao Tun represented Chin in negotiations with other States, and on the death of King Ch'ing 頃 he commanded an army of 800 chariots sent to the Chou capital to restore order and put a successor on the throne (*v.* 19, IV 310-317; V 14, 15).

So much is said here about Chao Tun because he was the first of his distinguished family to be called Chao Mêng, the designation that appears in the inscription (*v.* 74, V 242-245). Whether "Chao Mêng" should be

regarded solely as a personal title to be rendered "Chao Chieftain" is a question. Probably a title at first, afterwards it became associated with the name of the House (*v.* 74, II 420). Of Chao Tun's direct heirs for five generations, all but one are known to have been called Chao Mêng (*v.* 79, 119).

Chao So 朔, son and heir of Chao Tun, married the sister of the duke who succeeded Ling. His arrogance made him unpopular with the other great vassals, and caused them to plot the death of his entire family on the pretext of punishing the assassination of Ling, since they held Chao Tun morally responsible for the crime. How the pregnant wife of Chao So was saved from the massacre in 583, and her son restored the family dignities is the theme for one of the many romances which enliven the otherwise bare records of those times; the story is told at length in the *Shih chi* (19, V 15-22). Dramatized about the thirteenth century, it was in 1731 translated into French by Father Prémare, and it inspired Voltaire's *Orphelin de la Chine* which caused a sensation when played in 1755. The chief point to remark is that not until 546 did Chao So regain the highest rank such as his father and grandfather had held (19, V 23). At all events, during the preceding thirty-seven years no Chao Mêng could have played the important part which the inscription seems to indicate.

Chin reached its apogee in 578 when it mustered its allies and delivered a smashing blow to Ch'in. From the assassination of the reigning duke, five years later, the decline began. The power passed into the hands of six high dignitaries, chiefs of the families Chao, Wei 魏, Han, Chih 知, Fan 范 and Chung-hang 中行, who disputed among themselves the leadership, while the nominal ruler retained a semblance of authority only by exploiting their jealousies.

Let us now return to the eastern front. In 522 another Ch'u renegade came to Wu burning for revenge. He was Wu Yüan 伍員, more often called Wu Tzŭ-hsü 子胥, whose family had been put to death by the Prince of Ch'u. Finding that Kuang 光, cousin of the Prince of Wu, was likely to further his own schemes, he joined in a plot to put Kuang on the throne. A man disguised as cook was employed to stab the Prince with a dagger hidden inside his favourite kind of fish served to him at a banquet. Afterwards the scene became a popular one for wall-pictures; there is an example among the Shan-tung bas-reliefs (20, 154, 155, fig. 75).

Kuang, who then in 514 ascended the throne of Wu, was known as Prince Ho-lu. He has been mentioned before in these pages (p. 20). That year the third renegade from Ch'u arrived; his name is Po P'i 伯嚭. Both he and Wu Tzŭ-hsü, promoted to high posts, figure often in the history of Wu. At their instigation the attacks on Ch'u became more frequent and determined. From 512 to 506 Wu was victorious in four campaigns, the last ending with the capture of the Ch'u capital, and then Wu Tzŭ-hsü and Po P'i relieved their hatred by digging up the corpse of the prince who had ill-treated them, and flogging it publicly.

During the following years more fighting occurred in which the States of Yüeh and Ch'in took part. The long duel between Wu and Yüeh started in earnest when Prince Ho-lu, having attacked the latter State in 496, was defeated and died of a wound. At this battle an amazing stratagem proved successful. Several hundred condemned criminals in the Yüeh army, having been offered the chance of winning pardon by conspicuous bravery, were sent forward unsupported, in the hope that the other side would break its ranks to take them prisoners. This having failed, the criminals volunteered to sacrifice themselves, remembering that their lives were already forfeit. So they advanced slowly, unarmed except that each held a knife, and when close in front of the enemy all simultaneously cut their own throats. Horrified and flustered by the ghastly spectacle, the Wu army gave way before a sudden and determined charge. Prince Ho-lu's son, Fu-ch'ai 夫差, succeeded him, and the story is that the latter posted a sentry outside his chamber to remind him of the defeat every time he entered.

Two years later (494) Fu-ch'ai gained his revenge in a decisive naval victory on the Great Lake, and had at his mercy Kou-chien 勾踐, Prince of Yüeh. In spite of the protests of Wu Tzŭ-hsü, he listened to Po P'i and spared his rival's life in return for the latter's abject submission. Po P'i is said to have been bribed with treasure and concubines, and some accounts state that Kou-chien, his wife and chief general served the conqueror menially for several years before they were allowed to return home.

So arrogant had Fu-ch'ai become that, instead of strengthening his resources against possible revenge, he underestimated his dangerous neighbour, and exhausted his army with various campaigns in the north, again contrary to the advice of Wu Tzŭ-hsü. Victories over Ch'i and Lu may have gratified his vanity, but these distant expeditions played into the hands of

Kou-chien who made a show of loyalty by offering servile congratulations, while all the time feverishly preparing for attack. Wu Tzŭ-hsü's repeated remonstrances and warnings became irksome, and when Po P‘i slandered him, the Prince's dislike was inflamed to the point of sending a sword to Wu Tzŭ-hsü as a hint to commit suicide. That was in 484 B.C.; the minister's consequent death removed a restraining influence which might have saved the State from disaster.

Two years later Fu-ch‘ai summoned the Conference at Huang-ch‘ih, there to claim leadership over all the feudal rulers. He took with him an army of about 30,000 strong and his ally the ruler of Lu. He was met there by an envoy of the "Son of Heaven" and by the Duke of Chin who was accompanied by his prime minister, Chao Yang 趙鞅. I suppose that this Chao Yang is the person called Chao Mêng in the inscription on No. 12.

While Fu-ch‘ai had assembled his picked troops at Huang-ch‘ih and was awaiting the Conference, the Prince of Yüeh seized the opportunity to invade Wu in two directions. One army proceeded north, and, following the River Huai, took up a position in order to intercept the return of the Wu army from Huang-ch‘ih. The other, led by the Prince, attacked the capital, which stood on much the same site as the later city of Su-chou 蘇州. Though at first he was defeated by the Wu troops, the Prince soon overcame their resistance and entered the capital, capturing the Heir Apparent and the Wu generals. News of this disaster reached Fu-ch‘ai just as his dispute with the Duke of Chin was nearing the climax. Fu-ch‘ai, afraid lest the realization of his ambition might be jeopardized if the report spread, killed with his own hand the seven messengers. At this point Chao Yang advised the Duke to settle the dispute by force of arms; but, on the commander of the Chin troops reporting his suspicion that some calamity had befallen Wu, it was decided to temporize.

Fu-ch‘ai held a council as to the best course to take. His general Wang-sun Lo 王孫雒 (sometimes written Wang-sun Lo 駱 and sometimes Wang-sun Hsiung 雄) suggested an immediate attack on the Chin army. Accordingly that night the Wu troops were divided into three bodies, each numbering 10,000, and marched to the Chin camp. Arriving at dawn, they raised a terrific din, beating drums and shouting. The surprised Chin army manned the defences, while an officer was sent to demand an explanation of this warlike behaviour. Fu-ch‘ai excused his action by saying that it

was prompted by desire to champion the prestige of their common suzerain, the King of Chou, who, he pretended, had suffered indignities from the rulers of Chin. To demonstrate the perfect discipline of his following, he caused five officers, who previously for certain crimes had been sentenced to death, to advance and before the eyes of the Chin officer cut their own throats, thus repeating on a small scale the manœuvre practised by Yüeh so successfully fourteen years before.

On the way back the Chin envoy met Chao Yang, and after taking council they decided that the best policy was to give way. Accounts are, however, conflicting: some say that Fu-ch‘ai, others that the Duke of Chin was acknowledged the leader (*v.* **74**, V 830-833). Ssŭ-ma Ch‘ien gives both versions in different passages (**19**, II 53, 54; IV 30, 31, 334; V 38). At least one text states that the precedence was granted to Fu-ch‘ai on condition that he dropped the self-assumed title of Wang ("King" or "Prince"), and was content with his orthodox rank of Tzŭ ("Viscount"). At all events, some face-saving compromise seems to have been arranged; probably it allowed each to claim the victory.

The year 482 marked the peak and decline of Wu's fortunes. On his return from the conference, Fu-ch‘ai made peace with Yüeh, buying respite from attack with valuable gifts. Not long elapsed, however, before Kou-chien had all prepared for the final subjugation of his old enemy. A battle in 478 was followed by other victories, and at last in 473 he extinguished Wu, when Fu-ch‘ai took his own life. One of the first acts of the conqueror was to put to death the rascally Po P‘i who had long been in his pay.

Let us now turn to the inscription which is cast sunk on the outer aspect of the circlet, as may be seen on Plate XVI. It comprises 19 characters displaying unusual grace and regularity, and the repetition of it on the companion *hu* is a close parallel. When the circlets are in position, the characters lie on their sides. The intervals being equal, the spacing of the characters offers no clue to the beginning of the legend, and that imposes some uncertainty. My first tentative effort, published in the *Burlington Magazine*, took Yü 禺 as the opening character. The arbitrary expedient was then adopted of cutting up the inscription and arranging it in four columns for convenience in reproduction, while the actual distances between contiguous characters were preserved. Fig. 18 presents the inscription thus set out.



FIG. 18 Inscription on No. 12 as first arranged and deciphered

The translation given in the *Burlington Magazine* article is as follows: "I, Yü, safeguarded the Prince at Huang-ch‘ih by protecting him against the . . . of the Chao Chieftain. With the bronze bestowed upon me by the Prince I have cast this vessel for sacrificial offerings." For the argument which led to a tentative identification of "Yü," presumably the person who caused the vessel to be cast, I was indebted to Miss C. Y. Tsêng. As soon as association of the two names Huang-ch‘ih and Chao Mêng had been recognized as a clue to the historical Conference, the problem was to find someone who played a part there consistent with the supposed terms of the inscription, and whose name might be equated with "Yü." The general Wang-sun Hsiung seemed to meet the case; for his advice saved Fu Ch‘ai in the dilemma at Huang-ch‘ih, and "Hsiung" has phonetic affinities with "Yü." The validity of this identification depended, therefore, on the name Hsiung. He is so called in a number of texts, but the variant Lo occurs also. At the time the article was written I did not know that evidence favours Lo, rather than Hsiung. Dr. Arthur Waley pointed out to me a note by Sun I-jang on a passage of *Mo Tzŭ* which has Wang-sun Lo (but the third character wrongly written) in some versions and Wang-sun Hsiung in others. Sun surmises that confusion between the characters for Lo and Hsiung resulted from the occasional writing of the latter with the form 雒, which in *li* script resembles Lo 雒. He concludes that the balance of evidence is against "Hsiung" (*v.* **103**, I 9, 10). Whether he is right or not, recognition of the general as the man who caused these *hu* to be cast seems too speculative to be sustained. Abandonment of this theory does not, however, invalidate the main tenor of the first interpretation. "Yü" may signify some unidentified person; this and other possible explanations will be treated presently. The character following "Yü" is a crucial one for the meaning of the inscription. As here written, it normally stands for "Han," the name of a State, a city and a canal; the reading of it in that sense will be discussed later (*v. inf.* pp. 67, 68). On the other hand, it may stand for *kan*, "a shield," used as a verb equivalent to *kan* 扞 "to protect." This form, as written in Fig. 18 without the determinative, occurs on the famous *Mao Kung Ting* in a sentence which reads: "defend the King with your family." An ode of the *Shih ching* uses the same word when alluding figuratively to stalwarts as "shields" of the prince (**74**, IV 13, 14). The gap in the above translation was due to my failure to decipher the tenth character. It has

since been read as reported below; but I am bound to say the identification remains somewhat problematic until conclusive proof for it be found. In short, I still think that there is something to be said for my first tentative effort, though the part bringing in the Wu general seems no longer plausible. On these lines, Waley's version, given below, is more satisfying.

Before I propose another and less hazardous interpretation, I shall quote the views of a number of scholars who have commented on my article. Professor Jung Kêng 容庚 was the first to decipher the character which follows the name Chao Mêng. In a letter, which he kindly sent me at the beginning of last year, he read it as *chieh* 庎, a word meaning "to reward"; and the fourth character after that he took to be *t'i* 惕. A literal translation of his rendering is: "The Prince of Yü Han at Huang-ch'ih was rewarded by Chao Mêng. The bronze respectfully [received] by the Prince of [Yü] Han was used for casting this sacrificial vessel." Professor Karlgren, while approving of the association with the Huang-ch'ih Conference in 482, was sceptical about identifying Yü with Hsiung. He was good enough to suggest instead the reading 愚, a modest expression equivalent to *wu* 吾, meaning "I." Dr. Waley obligingly sent me this tentative translation: "Yü defended the King [of Chou] at Huang-ch'ih, and was (presented?) by Chao Mêng with bronze as a reward for defending the King. With it he made a sacrificial vessel." He supposed that Yü was the *ming* of a man of Chin, and that "defended the King" was an example of the way efforts at hegemony were spoken of in diplomatic language. Mr. Hopkins, equating *chieh* 庎 with its homophone 介, suggested: "I, Yü, when Han Wang was at Huang-ch'ih acted as Chao Mêng's intermediary in the matter of the bestowal by Han Wang of metal to be used for the casting of a ritual vessel." Professor J. M. Menzies' welcome letter contributed an argument based mainly on his reading as *an* 安 the character which follows the name Chao Mêng. He pointed to three inscriptions which contain, in his opinion, forms of 安 more or less similar to the character in question (*v.* 110, II 33; III 27-29; VI 122). Also he took 禺 to be a homophonous equivalent of Wu 吳. Accordingly his interpretation was: "A pact of peace was made with the King of Han, of the Wu State, by Chao Mêng at Huang-ch'ih. The money, which the King of Han gave, was used to make this sacrificial vessel." Professor Menzies cited a passage in the *Tso chuan* which alludes to an alliance concluded between Chin and Wu at the Conference

through the agency of Chao Yang. It narrates how an envoy from Chao Yang's son expressed regret to Fu-ch'ai for Chin's inability to help Wu when invaded by Yüeh in 475, the year after Chao Yang's death (*v. inf.* pp. 69, 70). "It may have been with this background that the vessel was made," suggested Professor Menzies, remarking that the pact between Chin and Wu seven years before must have protected Chin against attacks by other States. He surmised that No. 12 may have come from Chao Yang's tomb. With these views my second and alternative interpretation agrees to some extent, though I cannot accept the equation with 安, because the rounded form, which in archaic script invariably represents the 女 element, is absent from the character following "Chao Mêng."

Three Chinese articles followed my tentative effort in the *Burlington Magazine*, and contributed much to the discussion. In the first (79) Professor Liu Chieh denies that the "Huang-ch'ih" of the inscription is an allusion to the famous Conference, and he is the only critic to take this view. His reasons are twofold: the name "Yü Han" (or Han) postulates a time earlier than the incorporation of Han with Wu; and the design of No. 12 is stylistically older than that of the *Kung-wu Wang Fu-ch'ai Chien* 攻吳王夫差鑑. He points to the *Tso chuan* passage which proves that Han must have belonged to Wu at least as early as 486 (*v. inf.* p. 67). There is no gainsaying that; but his argument that "Yü Han" was a disyllabic name for Han is certainly open to question. And he does not attempt to explain why the State should be called both "Yü Han" and "Han" in this short inscription, or to account for the presence of the title "Prince" associated with a State so unimportant that history only casually mentions it. At the period in question few rulers had the temerity to usurp the royal title properly reserved for the "Son of Heaven," and if the ruler of Han had been one of them, surely the fact would have been recorded. Apparently no allusion to a ruler of a Han State can be found in literature or the inscriptions on bronzes, though there are passages, which the author cites, showing that at one time Han and Wu were separate. His bare assertion on stylistic grounds that No. 12 is more ancient than the above-mentioned *chien*, fails to carry conviction without criteria to support it. On the *chien* there is an inscription declaring that it was cast by "Fu-ch'ai, Prince of Kung-wu." When the bronze was lent by the late H. G. Oeder to the International Exhibition of Chinese Art (No. 581), I examined it thoroughly, and could

see no reason to doubt the inscription, which, if genuine, indicates a date between 495 and 473 B.C. Its style of script is much like that on No. 12. The stylistic contrast between the two as to ornament may be due to difference of locality rather than of time (*v.* 66, 155, fig. 160).

Liu, being concerned more with names than the cultural setting of No. 12, remarks other double syllables, such as "Chu-lou" 邾婁 and "Ch'u-ching" 楚荊, by which the States of Chu and Ch'u were sometimes called. There is also "Kung-wu," used as an alternative for "Wu," which occurs, for instance, on the *chien* mentioned above, and is equivalent to Kou-wu 句吳, the latter having persisted as a local name for that region to the present day. To take "Yü Han" as a parallel to these is reasonable, provided that it really is a disyllabic name; but there remains the need to explain away the anomaly of "Yü Han" in company with "Han." The author does not attempt to decipher the character which follows "Chao Mêng."

Professor T'ang Lan (105) begins by stating Professor Ma Hêng's 馬衡 opinion that the character 禺 is borrowed for 遇. Thus the latter's interpretation should read: "When meeting the Prince of Han at Huang-ch'ih, [I] acted as Chao Mêng's introducer. With the bronze bestowed by the Prince of Han this sacral vessel was made." While accepting this, T'ang Lan refers to the combination "Kan Yüeh" 干越 occurring in texts dating from the last few centuries B.C. He takes the view that "Kan" is phonetically akin to the ancient name for the Wu 吳 State which may have been pronounced like *ku* 孤, and that "Kung-yü" 工歔, "Kung-wu" 攻敔 (or 吳) and Kou-wu 句吳 are enlarged variants of the name based on the one phonetic element. In other words, "Kan" (or "Han" 邗) was a dialectal version of the name written "Wu" in the classics. Consequently the combination "Kan Yüeh" represented the current mode of naming the two neighbouring States. According to his theory, "Kan" 干 came to be mistakenly read as "Yü" 于 which in turn was adopted in writing "Yü-yüeh," the local disyllabic name for the Yüeh State. He thinks that this confusion between "Kan" and "Yü" resulted from "Kan" having been forgotten as the name for Wu according to the local dialect, owing to the fact that the State was called "Wu" in classical literature. While T'ang Lan agrees with my belief that the name Huang-ch'ih is an allusion to the famous Conference in 482 B.C., he supposes that before the Conference Chao

Mêng (whom also he identifies with Chao Yang) had a meeting with the Prince of Wu brought about through the agency of some unknown person whose services were rewarded with the gift used for casting the *hu*. No maker's name being in the inscription, according to this rendering, he remarks that such an omission is rare for the particular period, but that it occurs in the Shang-Yin and early Chou periods.

The third and longest Chinese article is by Mr. Ch'ên Mêng-chia (21); references to it have been made already. He reads "King of Yü Han" and "King of Han," and takes them to be variants of a title borne by Fu-ch'ai because Han had been a State annexed by Wu. Nothing being known as to the circumstances of this conquest, his remark concerning a passage in the *Tso chuan* should be quoted, because it may give some clue to the date. The event recorded is one of the many conferences of feudal rulers summoned by Chin to deliberate on the Ch'u menace. Wu's attendance was specially desired in the hope that help might be got from that quarter, and so a Chin envoy was sent to meet the Prince of Wu "on the Huai 淮上" (74, V 418, 420). Ch'ên infers from these words that the Huai River region must have belonged to Wu then in 570 B.C., and, if he be right, Han would also have been within Wu territory, according to the scanty indications of its position that are available (*v. inf.* pp. 67, 68). As to the reading of certain characters, Ch'ên notes that Huang-t'o 沱 is equivalent to Huang-ch'ih 池; he takes 介 to mean "to give" and he follows Professor Jung Kêng in his deciphering of the character after 之 (*v. sup.* p. 63). His interpretation of the inscription is given in English as follows: "King Yü Han at Huang-t'o, because of the gold offered to King Han by Chao Mêng, made this sacrificial vessel" (21, 351). Accepting the identification of "Huang-ch'ih" with the famous Conference and "Chao Mêng" with Chao Yang, he supposes that "these vessels, whose style and inscription point to their undoubted Chin origin, were given by an official of Chin to King Wu, whose earlier title is inscribed as a hint of disrespect, while a formal obligation is fulfilled" (21, 352). His words "undoubted Chin origin" refer to the reputed provenance of No. 12 and to the evidence presented by certain analogous bronzes excavated in the Chin region. Perhaps the English summary fails to represent the author's views correctly. He may not really think that *chin* 金 here means "gold"; for usually during the archaic period, and especially in inscriptions on bronzes, the term denoted bronze, the metal *par excellence*.

And the words : " whose earlier title is inscribed as a hint of disrespect, while a formal obligation is fulfilled " seems hardly to convey the gist of the argument in his article. As already mentioned (p. 60), one account of events at Huang-ch'ih states that while Fu-ch'ai succeeded in pressing his claim to the leadership, he agreed to call himself, not King of Wu, but by the noble rank to which he was properly entitled. The author accepts this version of the episode as plausible, and his point is that, if Chin craftsmen had cast the bronzes, they could hardly have inscribed the words " King of Wu " which would have been inconsistent with the compromise arranged to satisfy the Duke of Chin. So they chose " King of Han " which was less exalted since it named only part of his dominions. Apparently the author calls the title " earlier," because he assumes that there had been a " King of Han " before the State or region of that name was annexed by Wu, and that when the conquest was achieved the King (or Prince) of Wu naturally took " King of Han " as a secondary title. My doubts whether an independent " King of Han " ever existed have been expressed (*v. sup.* p. 64).

Probably the mention of Han in the *Tso chuan* relating to 486 B.C. is the earliest. It is confined to the brief statement : 秋吳城邗溝通江淮 which Legge translates : " This autumn, Wu walled Han, and then formed by a channel a communication between the Chiang and the Huai " (74, V 818, 819). Or it might be rendered : " This autumn, Wu fortified Han Kou, and joined the Chiang with the Huai," taking Han Kou as the name of a canal. Tu Yü's comment is : " On the Han River 邗江 they built a rampart [or perhaps a city wall] and dug a canal which in the north-east joined the Shê-yang 射陽 Lake and in the north-west reached Mo-k'ou 末口 where it entered the Huai River—a channel for the transport of grain. It is the present Han River 韓江 in Kuang-ling 廣陵." Juan Yüan adds a note that in some texts the last sentence has 邗 instead of 韓 (109, LVIII 17 and *Chiao k'an chi*, 5). In the section concerning the Huai River, the *Shui ching chu* says : " Formerly, when preparing to attack Ch'i and go northward to become leader of the Central States, Wu built the Han rampart south-east of Kuang-ling City, and beside the rampart dug a deep canal which was called the Han River 韓江 and also the Han-ming Canal 邗溟溝." On referring to the map, this canal is marked running northwards from the Yang-tzŭ almost opposite to, but slightly west of, Golden Island 金山, near the treaty-port of Chên-chiang in Chiang-su (123, V, map South 7, East 1). Kuang-ling

was a commandry under the Han dynasty, and the city of that name afterwards became Yang-chou 揚州, well-known to us in the West as the place where Marco Polo is said to have been governor. If we take Tu Yü's statement to mean that the Han Kou ran from the Yang-tzŭ to Mo-k'ou, the length of the canal was some 95 miles, and its course corresponded with that of the later Grand Canal between the Yang-tzŭ and the present Huai-an 淮安. According to indications given in the *Shui ching chu*, the ancient Huai River's course was that which we know the Yellow River subsequently followed from time to time between 983 and 1853, and the position of Mo-k'ou on the Huai was just north of Huai-an (*v.* 123, V, map South 6, East 1). Under the character Han 邗 the *Shuo wên* has the entry : " A State, now belonging to Lin-huai 臨淮 . . . Some say that Han originally was part of Wu " (49, VI B, 8). At the time when this was written there existed a commandry called Lin-huai with its headquarters near the spot where the present Huai River enters the Hung-tsê 洪澤 Lake (*v.* 123, V, map South 7, East 1). The position is approximately lat. 33° and long. 118° 20′, or some 65 miles south-west of Huai-an.

The foregoing indications leave the locality of Han undefined, though clearly it must have been near the course of the later Grand Canal, and between the Huai and the Yang-tzŭ. A fact to remark is that under the T'ang dynasty the city known to us as Yang-chou was called Han Chou 邗州, doubtless in memory of ancient associations. Clearly also Han was linked with some of Fu-ch'ai's most ambitious enterprises. In his day, as now, the Wu territory was a network of waterways. Boats were the normal means of transport, and armies were amphibian : naval battles were fought on the lakes and the strategy of campaigns depended upon water communications. The digging of canals, briefly noted in the *Tso chuan* relating to 486 B.C., was undertaken for Fu-ch'ai's invasions of Ch'i and for the major project of claiming the leadership at Huang-ch'ih. His armed progress into the centre of China was along the prepared waterways northward to the Huai, then he turned west up that river for a short distance until the mouth of the Ssŭ River was reached ; the last part of the direct route to Huang-ch'ih has already been traced (*v. sup.* p. 54). Incidentally it may be remarked that Fu-ch'ai's enterprise started the system which later became the Grand Canal, a legacy valuable to China for more than two thousand years until the coming of mechanical transport.

To the Huang-ch'ih Conference there was a sequel, an account of which in the *Tso chuan* adds so substantially to the historical information likely to throw light on our inscription that I quote it in full, giving Legge's translation with slight modifications. In 475 B.C. the Wu capital lay under siege by Yüeh, while the death of Chao Yang, virtual ruler of Chin, was being mourned by his second son who had succeeded him as head of the family and therefore taken the designation Chao Mêng. The latter's personal name was Wu-hsü 無恤 (otherwise written 毋卹), and he is often called by his posthumous name Hsiang-tzŭ 襄子. An officer in attendance, Ch'u Lung 楚隆 by name, noticing that his master was fasting more rigorously than custom required, asked the reason. " Chao Mêng replied : ' At the Huang-ch'ih meeting my father made a covenant with the King of Wu that [Chin and Wu] should make common cause in their likings and dislikings. Now Yüeh is besieging the capital of Wu. If I, as my father's heir, do not make void his engagement, I ought to oppose Yüeh, but this is what Chin is not able to do ; and I therefore have diminished my diet.' Lung said, ' Suppose you should send and make the King of Wu acquainted with the circumstances.' ' Can it be done ? ' asked the minister. ' Allow me to try it,' said the other ; and he took his way to the scene of strife. First he went to the army of Yüeh, and said [to the viscount of that State], ' Many have been the attacks and injuries committed by Wu on your superior State, and the people of our [northern] States have all been glad to hear that your lordship is now punishing it in person. I am only afraid that your desire may not get its satisfaction, and beg your leave to enter the city that I may see.' Permission was granted to him ; and he then said to the King of Wu, ' Wu-hsü, the minister of my ruler, has sent me, his servant Lung, to venture to explain and apologize for his not coming to your assistance. [His father] Chih-fu 志父, the former minister of our ruler, undertook the engagement of the covenant at Huang-ch'ih, that Chin and Wu should make common cause in their likings and dislikings. Your lordship is now in difficulties. Wu-hsü would not dare to shrink from the toil ; but Chin is not able to make the effort, and he has sent me to venture to represent to you his case.' The King bowed with his head to the earth, and said, ' Through my incapacity I have not been able to serve Yüeh, and have thus caused sorrow to your minister. I acknowledge the condescension of his message.' He then gave Lung a small basket of pearls which he sent to Chao Mêng, saying,

' Kou-chien will cause me grief while I live ; I would die, but death will not come ' " (74, V 852, 853).

Though the words put into the mouths of the speakers are doubtless imagined, the passage may be evidence that a pact of mutual protection was concluded between Wu and Chin at Huang-ch'ih, the Chin plenipotentiary being Chao Yang. Ssŭ-ma Ch'ien says of him some years before the Conference that " he exercised all the authority in the Chin State, and his apanages were as considerable as those of a feudal principality " (19, V 38). At the time he was the virtual ruler, and his goodwill must have been an essential factor in the realization of Fu-ch'ai's aims. Evidently Fu-ch'ai gained what he wanted in spite of the weakening of his position caused by the Yüeh invasion ; history implies as much, though accounts of the final compromise are contradictory. Evidently too the Conference resulted in a renewal of the old alliance between Wu and Chin which had started in 584. There is no reason to suppose that Chao Yang was bribed had he accepted from Fu-ch'ai recognition of his services in much the same way that our diplomats receive decorations. Bronze, or the equivalent, to provide ritual furniture for the Chao ancestral temple would have been a graceful and fitting gift. Alternatively, it needs no great stretch of imagination to suppose that the " small basket of pearls," which Fu Ch'ai sent to Chao Yang's son, was converted into bronze sacrificial objects. Mourning for Chao Yang being then in progress, there could have been no more appropriate act to honour his memory. The surmise that No. 12 was intended for the Chao ancestral shrine or for rites at Chao Yang's death, and came to be buried in the latter's tomb or that of his son, hardly accords with the reported place of discovery. During the first half of the fifth century B.C. the family had its headquarters at Chin-yang 晉陽, near the present Yang-ch'ü 陽曲 (formerly called T'ai-yüan 太原 Fu). According to the topographies, Chao Yang's tomb was 30 *li* north-west of Shou-yang 壽陽 Hsien and Chao Wu-hsü's about 5 *li* south-east of Ting-hsiang 定襄 Hsien. Yang-ch'ü lies some 200 miles north-west of Chi Hsien, where No. 12 is said to have been found ; the distance of Chao Yang's tomb is about the same, and that of his son's some 55 miles further north. In 457 Chao annexed Tai 代, the region round Ta-t'ung 大同, and later the Chao territory was extended northwards ; it never came so far south as Chi Hsien. In 424, however, the Chao capital was moved to Chung-mou 中牟, on their southern frontier, about 15 miles

south-west of An-yang, and so not much more than 35 miles north of Chi Hsien. At the time of the Conference, Chi Hsien was in Wei 衛; after the partition of Chin in 453 it belonged to Wei 魏. Of course the report that No. 12 was found near Chi Hsien may be untrue, perhaps it merely names the place where dealers bought the pair.

Having investigated the believed stylistic and historical associations of No. 12, it remains for us to inquire what clues to time and place may be got from the form of the script. The rare grace and regularity of the characters have been remarked; parallels are few. In my former article certain inscriptions of southern States were noted for comparison, and again I would point to similarities presented by examples from Wu, Yüeh, Hsü 許, Hsü 徐 and Ch'u (*v.* 66, 155-176, 179, 180, 194-198). There are besides two Chü 莒 inscriptions which have some features in common with the script of No. 12 (*v.* 66, 187). This State was extinguished by Ch'u in 431 B.C., and it lay near the coast on the south-east of Ch'i. In Ch'i also a tall, regular script was current, but it had its own characteristics. Such analogies, emanating from the south and east, by no means detract from the likelihood of Chin associations; for in all these regions descendants of the Shang-Yin people lived, and this tall, slender style manifests vestiges of the Shang-Yin tradition. Unfortunately the opportunities of comparison with script from the Chin region are scanty. One example, the *Chin Kung Tien* 晉公盦, was probably cast about the time of the Huang-ch'ih Conference; for the inscription states that it was a wedding present from Duke Ting 定 to his eldest daughter on her marriage to a Ch'u prince (*v.* 66, 268). But the script is not like that on No. 12; it has greater affinity with the Chou tradition, offering comparison with the famous Lü 郘 Bells, products of the same region (*v.* 66, 269-276). Nor is there close stylistic connection between the inscriptions on No. 12 and the pair of *hu* said to come from Chin Ts'un, though the latter present similarities of design, as already remarked (*v. sup.* p. 47). Not far removed from the last is the script on the large pair from Shou Hsien, probably cast in 344 B.C. (*v. sup.* p. 51 and 66, 181). While these *hu* were found among Ch'u remains, and therefore are classified as such, reasons exist for associating them with the Central States rather than Ch'u. The person who had them cast was a member of the Chi 姬 clan and of the Tsêng noble family which may have had a seat in the Chêng State. Last, we come to the only inscription from the Chin region offering a near



FIG. 19 Inscription on No. 12: an alternative arrangement and decipherment

analogy to that on No. 12 (*v.* 66, 277-278). The Piao Bells were evidently cast by a retainer of the Han 韓, one of the three Houses among whom Chin was officially partitioned in 403 B.C. Contrary to dogmatic assertions that the Bells were cast in 550 B.C., there is strong evidence for 398 B.C., and this, in my opinion, is the probable date.

All things considered, I propose this alternative to my former interpretation of the inscription, putting "Yü" last, instead of at the beginning: "At Huang-ch'ih the Prince (or King) of Han was aided by Chao Mêng. With the bronze bestowed by the Prince of Han this vessel has been cast for sacrificial offerings. Yü" (*v.* Fig. 19).

Fu-ch'ai remains the donor; "Chao Mêng" is still Chao Yang; and "Huang-ch'ih" still signifies the famous Conference of 482; none of these identifications has been disproved by the fresh historical and other data. Thus time and place are the same, though later arguments show a stronger bias in favour of Chin workmanship. The chief change is "Prince of Han," a reading the first to be considered when my former interpretation was attempted, because to take the character before *wang* 王 as a territorial designation is the most obvious construction. "Prince of Han" then seemed improbable, and it became a plausible proposition only later when arguments were found to support it. That this supposed title was an alternative or secondary one assigned to or claimed by Fu-ch'ai is still, however, an unproved theory. A point in its favour is the likelihood that Han (or Kan) existed as a political or geographical entity. Besides the evidence previously advanced for this there is a passage in *Kuan Tzŭ* 管子, a book which ostensibly relates to the seventh century B.C., but in its present form was compiled hundreds of years later. The passage may have been one of those which were saved from the lost original, and with these reservations I quote it from the section entitled *Hsiao wên* 小問. A brief anecdote is used to illustrate the theme that "the small should not be despised just because they are small, nor the humble just because they are humble." It runs: "Formerly when Wu and Kan were at war, and those who had not yet shed their milk teeth were unable to enter the army, the son of an official (*kuo tzŭ* 國子), having knocked out his teeth, gained admission, and did much for the Kan State (*wei Kan Kuo to* 爲干國多)." In each of the three Chinese articles passages are quoted containing the combination "Kan Yüeh" 干越, but the inference that "Kan" is there synonymous with "Wu" 吳

seems inconclusive, because there is no certainty that "Kan" was not so used in reference to a part of Wu only. Lack of record concerning Wu's conquest of Han (or Kan), leaves the date conjectural. In 584 the earliest known attacks on Ch'u territory took the Wu forces in both north-easterly and north-westerly directions beyond the Han region, and so the supposition is reasonable that Han was annexed then, if not before (*v. sup.* p. 55). There is also mention of a Chin envoy in 570 going to meet a Prince of Wu "on the Huai," and perhaps that implies possession of the River (*v. sup.* p. 66). At all events, Han must have been part of Wu territory in 486 (*v. sup.* p. 67). Several of Fu Ch'ai's major successes were associated with the Han region, and that fact may justify to some extent the reading "Prince of Han."

The next point for comment is the identification of the character which follows the name Chao Mêng. For the purpose of this alternative translation the views of Jung Kêng and T'ang Lan have been adopted (*v. sup.* pp. 63, 65, 66); but I am bound to remark that unquestionable proof that the character in the inscription is an archaic form of *chieh* has not yet been produced. From other bronzes no light is forthcoming, since the character seems to be unique among recorded inscriptions. Its identity is problematic, and therefore I refrain from lengthening this discourse with attempts to explain its structure and the word it is thought to represent. Some fifteen different meanings of *chieh* appear in the *K'ang-hsi Dictionary*; in fact, the range is so wide that a translator finds plenty of latitude. My choice of the verbal sense "to aid" has classical sanction.

The "Yü" has been placed at the end for several reasons. On the assumption that it is a name or distinguishing mark of the person who caused the bronzes to be cast, it can hardly be taken at the beginning unless the tenor of my first effort be retained, and now I am offering an alternative. The inscription seems to be of the type which records an achievement, its reward, the person who had the bronze made, and a dedication. Generally the hero of the event thus commemorated is the maker; for the impulse seems almost invariably to have been self-glorification, even when show is made of solacing ancestors or of enhancing the family prestige. Here all these customary ingredients are clearly present except the name of the maker and the dedication, though as to the latter the terms might be taken to imply that the Chao ancestral temple was to be the place of the "sacrificial offerings." My supposition is that "Yü" stands for Chao Yang himself,

or his son, or other near relative, or a family retainer. Many of the more archaic inscriptions end with a character or two syntactically isolated. Sometimes decipherable, more often they appear to be emblems to which we have no clue. A possible instance of such a signature, if it may so be called, has been noticed previously (pp. 22, 23). Examples assigned to the latter part of the Chou period are less frequent; several date from about the time of No. 12 (*v.* 65, 214, 226, 247, 250). The theory that "Yü" may be read last offers a means of recognizing that the maker of the bronze is not left unmentioned. Also it avoids the anomaly of "Yü Han Wang" occurring together with "Han Wang" (*cf. sup.* p. 64). Another reason for it is that it has not been suggested before, and my aim is to put before the reader all possible solutions of this difficult problem.

In conclusion, the date 482 B.C. or soon afterwards is almost certain, and the Chin State is the probable locality. To students of the archaic bronzes these two criteria are by far the most important. The precise meaning of the inscription remains undetermined; such diversity of opinion as has been expressed is a measure of the perplexities, and there is little hope of finality without fresh archæological evidence. Association with Fu-ch'ai and the Chao family seems warranted. In the light of present knowledge, No. 12 may be claimed as a unique index in point of time and place to a large group of early Third Phase bronzes.

NUMBER THIRTEEN Plaque with ring Third Phase Height, 4 inches (10·1 cm.) Plate XVIII

THIS is placed next to the *Huang-ch'ih Hu* because the design of the mask resembles that on the tallest encircling zone of the *Hu*. Alike as to general shape, the two have similar granulations and striæ. It is a style of mask that persisted for some time during the latter part of the Chou period;

and the fifth century B.C. is probably the earliest date that should be assigned to it.

A tang that projects horizontally from the back of the plaque is not visible in the photograph. In height it tapers from ¾ inch at its base to ½ inch at the end of its length of ½ inch; in thickness it is uniformly just over ¼ inch. This wedge-like shape and the absence of a perforation to receive a securing pin indicates, I think, that No. 13 could not have been designed to withstand strain applied to the ring. Had it, for instance, been one of several fitted to a heavy object, such as a coffin, the rings would not have provided effective means of lifting, because an upward pull would have dislodged the tang, as I have proved by experiment. In short, the purpose was ornamental.

NUMBER FOURTEEN Axle-cap with pin Third Phase Height, 2⅛ inches (5·4 cm.) Plate XIX

A NOTEWORTHY feature of this piece is the symmetric design of entwined serpents on a granulated ground which is paralleled on a bowl belonging to Mr. A. Hellström (4, pl. 32) and on a *tou* 豆 in the Sumitomo collection (112, pl. 52). An axle-cap in the Hallwyl collection resembles this one, except that the pattern on its rim is a row of cowries instead of a twisted cord (112, pl. 110).

One end of the linchpin is decorated with a feline mask, and both ends are perforated to allow the passage of a lashing to hold the pin in place.

NUMBER FIFTEEN Part of a *lien* 奩 Third Phase Diameter, 4½ inches (11·4 cm.) Plate XIX

THE circlet with a horizontal flange ¼ inch wide, projecting inwards from its lower edge, is cast in one with the three feet. The decorative design is done with silver inlay. From the shape, it apparently served as a stand or support for something, and enough evidence is available to warrant the supposition that the something was a *lien*. In the *Shuo wên*, the word *lien*, there written 籢, is defined as a "mirror *lien*" (49, V A, 2). The catalogue of the Sung imperial collection has a note on two casket-shaped vessels which the compilers wrongly classify as *lien* of the Han period (*v. sup.* pp. 39, 40). It runs as follows: "According to Hsü Shên, the *lien* served for mirrors. It is to be noticed that many vessels for containing objects of the ancients were classified as *lien*, and that the things they held were not confined to mirrors. Ting Tu 丁度 [990–1053] has stated that *lien* were used for aromatic substances, and probably he based this remark on vessels such as these" (118, XXVII 17).

The simplest type of *lien* was a cylindrical box, and probably the ordinary kind was made of bamboo or wooden slips, the sides being held together with hoops of metal or some other binding. The fact that the form of the character given in the *Shuo wên* has a "bamboo" determinative supports this conjecture; and I have seen two examples made of wooden staves covered with lacquer and encircled with bronze hoops. For such a mode of construction the minimum bronze fittings are a hoop round the mouth and a flanged circlet at the bottom to support the cylinder and floor of the vessel. Another hoop round the middle may or may not be added. Possibly No. 15 functioned for a bamboo or wooden *lien*. But the cylinder and floor may have been cast in bronze, while the one or two hoops and flanged circlet were each cast separately. Bronze *lien* so made are known, the several parts being soldered together, imitating what may be taken to have been a prototype in less costly material. Thus the rule would be exemplified that bronze vessels are glorified counterparts of ordinary vessels in common use. A plain type of such a bronze counterpart belonged to the Manchu imperial collection (5, XVII 10), and there is one, perhaps a later type, still complete with cover in the Eumorfopoulos collection (127, I A, 77). The last-named

collection includes a closer parallel in the base of a *lien* which has a design, inlaid with silver, of rhombs, diagonals and spirals like No. 15 (127, I A, 76). Another analogy appears in one of the supplements to the Manchu collection (5, XVII 11).

This style of design and technique occurs frequently among the bronzes reported by Bishop White to have been found at Chin Ts'un (*v.* 122, pls. 4-7, 9, 24, 75). Probably it dates from the latter part of the Third Phase; but it may have persisted until Han times. The practice hitherto followed of assigning to the Han period the numerous objects so decorated must now be reconsidered.

NUMBER SIXTEEN A *to* 鐸, uninscribed Third Phase Height, 7½ inches (19·1 cm.) Plates XX & XXI

AS may be observed from the photographs, the barrel of this bell is lentoid in cross section, and tall in proportion to its width. The shank is long enough to be grasped in the hand. No. 16 belongs to the class of *to*, or hand-bells, a characteristic feature of which is the presence of a clapper or, as the Chinese call it, a "tongue." Certain archaic examples have a bronze clapper hanging from a bar running across the shorter diameter of the barrel (*v.* 127, II B, 4). This kind with a bronze clapper has been called the *chin* 金 *to* in contradistinction to the *mu* 木 *to* mentioned in the classics and explained by commentators as one with a wooden clapper. There is a sentence in the *Shu ching*: "Every year in the first month of spring, the crier with his *mu to* goes along the roads, proclaiming . . . ." (*v.* 74, III 164). And in the *Analects* Confucius is likened to a missionary, calling to virtuous ways, thus: "The kingdom has long been without the principles [of truth and right]; Heaven is going to use your master as a *mu to*" (74, I 164). The *mu to* as a means of calling public attention to edicts and other announcements

is named six times in the *Chou li* (11, I 57, 67, 230, 237; II 326, 381). Perhaps the *mu to* was not a bronze bell with a wooden clapper, but really a wooden bell. The conclusion derived from passages in early literature is that the *to* served many purposes: as instruments of music; for army signals; for funerary rites; and as our own town-criers use their bell to the present day. A clapper was usually fitted to the bronze *to*, as remarked above. Evidence of this in 482 B.C. is afforded by an account of the warlike demonstration by the Wu troops at Huang-ch'ih (*v. sup.* p. 59). When at dawn they did their utmost to make a terrifying din outside the Chin camp, the Prince of Wu himself, according to the narrative in the *Kuo yü* 國語 (XIX 4), beat on the drums and clapperless bells and "shook the *to*."

Nevertheless, no trace of a clapper is to be found inside No. 16 (*v. inf.* p. 82). Yet beyond doubt No. 16 is correctly classed as a *to*. It is shaped like a certain inscribed bell which may be regarded as analogous, although the script on the latter indicates an early Chou period. The legend reads: "So-and-so made this precious *to*; for a myriad years may it ever be treasured and used" (*v.* 68, 110). As to decorative design and general form, No. 16 resembles a group of bells found in Chiang-su and Chê-chiang. One was dug up by a farmer in 1788 outside Ch'ang-shu 常熟, about 23 miles north of Su-chou. On the end of its barrel near the handle is a design, reproduced in Fig. 20, which, though differing in detail, displays an arrangement similar to that on No. 16. In the inscription of 39 characters the bell is called a *kou-t'iao* 句鑃.

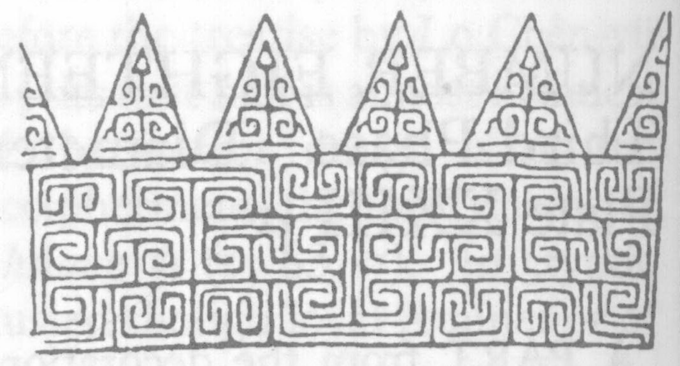


FIG. 20 Part of decoration on barrel of the *Ku-fêng Kou-t'iao* (*v.* 66, 158) Slightly reduced in size

Two other similar bells were found, together with more than ten uninscribed bronzes, in the hills near Wu-k'ang 武康, some 20 miles north-west of Hang-chou. These bells also bear an inscription which names them *kou-t'iao* (*v.* 68, 95-112; 110, 76-81). Now, Wang Kuo-wei equates the words *t'iao* and *to*, and concludes that the ancient nomenclature persisted (119, 1). In short there seems to be good reason for the classification of No. 16 as a *to*.

The oldest *to* have barrels of which the width is greater than the height,

and probably they are the ancestors of all Chinese bells. Judged by the style of their decoration and inscriptions, they belong to the Shang-Yin period. Some have as sole design a so-called *t'ao-t'ieh* mask on either side (*v.* 110, I Supp. following II; 127, II B, 4). These masks are disposed in a manner which shows that the bell was normally held with the mouth uppermost. The inscription on the aforesaid Chou *to* starts from the top when the mouth of the bell points downwards, and perhaps that manifests an intermediate stage before the hanging bells called *chung* 鐘 were evolved. Apparently the *to* or *kou-t'iao*, found south of the Yang-tzŭ, approach the archaic type.



FIG. 21 Decoration on *wu* of No. 16 Actual size

Like the Shang-Yin bells, the mouth was apparently regarded as uppermost, in evidence of which the inscriptions start from the mouth. Moreover, the inscription on the bell excavated at Ch'ang-shu states that it was made according to Shang pattern; but, as before remarked, these later *to* differ from their archaic forerunners in having the barrel taller than it is wide.

The *kou-t'iao* bells are the closest known analogies to No. 16, though their decoration typifies an earlier stage of the Third Phase. They were found in localities which became Yüeh territory after that State's final conquest of Wu in 473 B.C., and one inscription mentions a name which may be identified with a Yüeh statesman. Such clues suggest a like provenance for No. 16, and there is, indeed, a report that it was found near Ch'ang-sha 長沙, which, though actually in Ch'u territory, was not far from the Yüeh frontier.

For clues to the use of No. 16 we must turn to the same inscriptions. One states that the purpose of the bell was to please the maker's guests and relatives, and it ends with the wish that "it may ever be preserved and used by his descendants." Another speaks of satisfying the dictates of filial piety, and also expresses the hope that it may become a family heirloom. Clearly,

therefore, these *to* were not the kind designed for signalling military commands or for heralding public announcements.

Plates XX and XXI show feline masks at either end of the handle looking different ways; neither the pair of masks nor the rest of the decorative design, consisting of symmetric patterns, gives an inkling as to the proper top of the bell. The most interesting piece of ornament is that around the insertion of the handle, upon the horizontal part of the barrel which technically is termed the *wu* 舞 (*v.* Fig. 21). On a granulated ground in each of the quarters are two dragons whose hinder parts coalesce, and the design displays remarkable zest. Somewhat similar treatment of the dragon motif

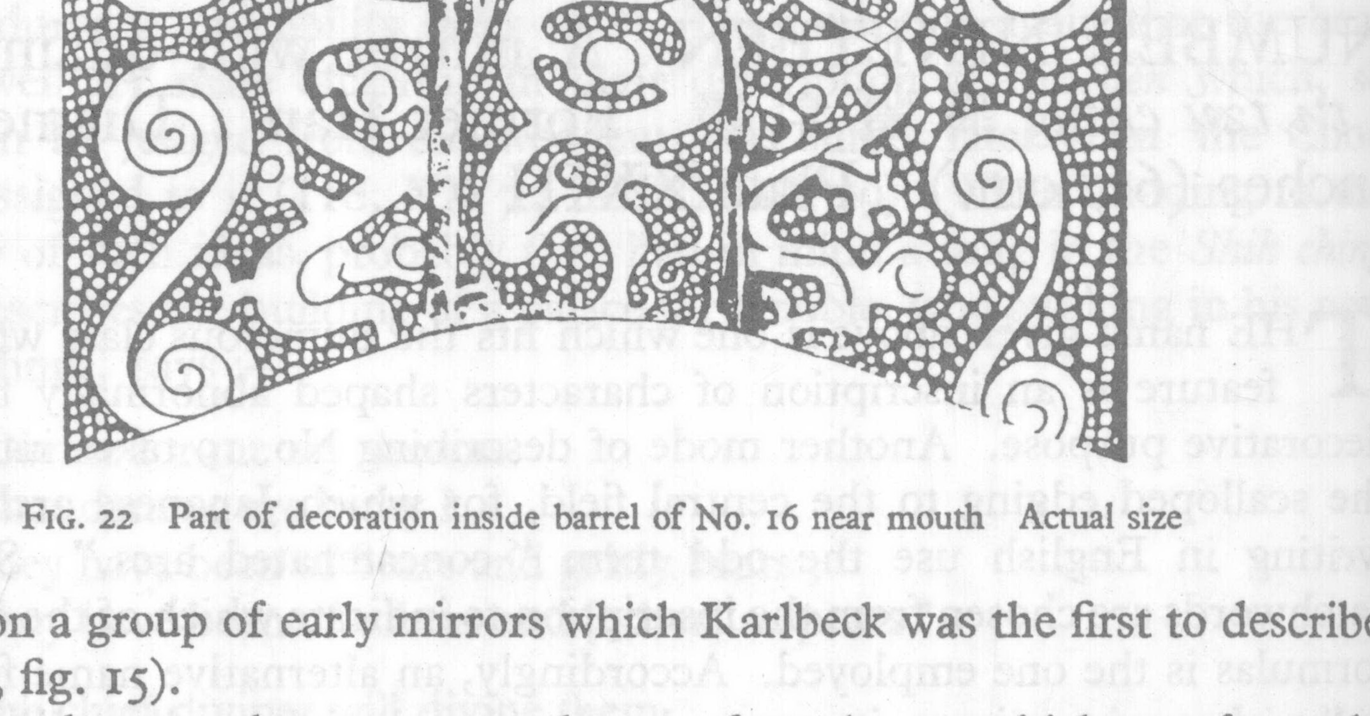


FIG. 22 Part of decoration inside barrel of No. 16 near mouth Actual size

appears on a group of early mirrors which Karlbeck was the first to describe (*v.* 57, 9, fig. 15).

These dragons also appear on the *wu* of another *to* which was formerly in the Manchu imperial collection, though the published drawing represents them far from clearly (77, XXXVI 49). In the catalogue the bell is labelled "Coiled-*k'uei to* of the Chou period 周蟠夔鐸," and that would fit No. 16 equally well in respect of the design copied in Fig. 21. But the bell from the imperial collection has dragon figures also on the barrel and handle, where No. 16 has symmetric patterns. If the drawing in the Manchu catalogue be compared with the photograph of a *to* in the Sumitomo collection (112, pl. 106), the two look so much alike that the question arises whether the same bell is not represented. After the destruction of the Summer Palace

in 1860, many of the bronzes included in the *Hsi-ch'ing ku chien* passed into private collections.

The whole interior of No. 16 is covered with somewhat confused decoration in low relief, giving the appearance of having been rather carelessly imprinted with dies. A drawing done of part of one side near the mouth provides a fair sample of the rest (Fig. 22). These designs extend evenly from mouth to *wu* without break in continuity; thus there is no trace of provision for some contrivance from which a clapper might have been suspended. Certain examples of this class of bell have near the *wu* four short vertical grooves, one on either side of each lateral edge (or *hsien* 銑) of the barrel. Perhaps these grooves were prepared to receive the ends of two crossed bamboo or wooden slips, and the clapper was hung from the point in the centre where the slips met. Some such device must have been used for No. 16; the manner of securing it has left no trace.

A probable date for No. 16 is the fourth or third century B.C.

NUMBER SEVENTEEN A *ho* 盉, uninscribed Third Phase Height (to top of handle), 8⅛ inches (20·6 cm.)

IN the classics the character for *ho* does not occur as a ritual vessel class-name, yet in inscriptions on bronzes it has that significance: Jung Kêng gives ten examples (51, V 10). Sung archæologists had the notion that the *ho* were used for sauces, doubtless based on Hsü Shên's definition that the word meant "to blend flavours *t'iao wei* 調味" (49, V A, 9). Obviously the small spout and general shape of the vessel are suited to thin rather than thick fluids. And as Wang Kuo-wei remarks, the famous Pao-chi set, now in the New York Metropolitan Museum, includes a *ho* while all the rest of the vessels are known to have been used for wine. Hence he concludes that the *ho* must also have functioned in the wine ceremonial, and also he

cites passages from classical writings to prove that the custom was to mix water with the wine on many occasions (119, 7, 8; 120, III 13, 14). There is now general agreement that the true purpose of the *ho* was to hold water for mixing with wine or perhaps to contain the mixture itself.

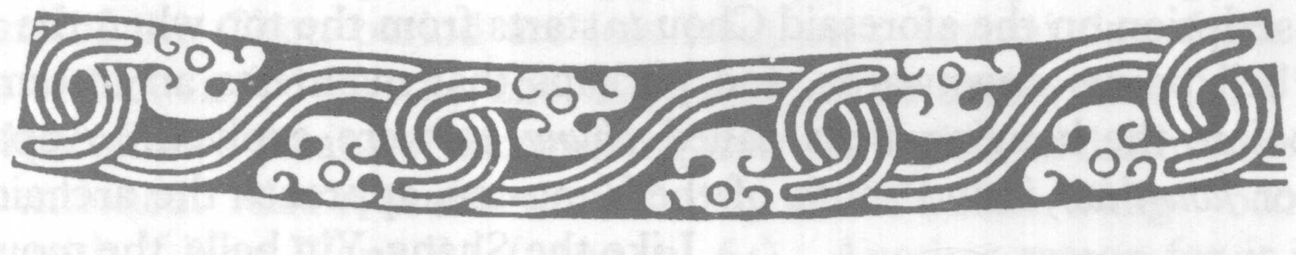


FIG. 23 Detail of decorative zones on body and cover of No. 17 Actual size

The pleasing design copied in Fig. 23 appears in zones as the main scheme of decoration. It may be regarded as a variant of the motif on the *wu* of No. 16, since it comprises two dragons whose hinder parts coalesce, though here the elements are entwined. Accordingly the same term is applied to it in Chinese nomenclature—the " coiled-*k'uei* device "—as, for instance, when Jung Kêng writes a note on a piece in his collection, a squat-shaped *ting* which has zones exactly like those of No. 17 (54, 3, pl. 17). The design also appears round the base of a Third Phase *hu* said to have been excavated in Rome (114, pl. 1). Perhaps from the same species of dragon are derived the form for the spout of No. 17, and the head which adorns each of the two loops for securing the handle-ends. The handle itself is fashioned as two dragons whose hinder parts coalesce, and is appropriately marked with the " scale pattern." Upon the expanded upper part of each leg there is a mask expressed in sunk line—a curiously transformed descendant of the so-called *t'ao-t'ieh*, so disguised with apparently meaningless elements that the essential features might pass unrecognized except by those familiar with the archaic tradition (Fig. 24). It displays, too, qualities which have been noticed as characteristic of the First Phase, lack of meticulous symmetry and yet achievement of a satisfying balance (*cf. sup.* p. 26).



FIG. 24 Decoration on a leg of No. 17 Actual size

Formerly in the Manchu imperial collection there were numerous *ho* of the type to which No. 17 belongs, and among them is one which differs

only as to minor details—absence of the " scale pattern " from the handle and of the masks from the legs (77, XXXI 49). Another has round the rim of its cover the same design as that copied in Fig. 23 (77, XXXI 59). No. 17 is reported to have been found in the region of Shou Hsien where many Ch'u relics have come to light in recent years (*v. sup.* p. 51). It may date from the fourth or third century B.C.

NUMBER EIGHTEEN A " feather and curl " mirror Third Phase Diameter, 3⅜ inches (8·6 cm.) Plate XXIII *a*

APART from the decoration, this mirror has three early characteristics: thinness, flatness and a fluted loop for the cord. Radiating from the circular seat for the loop is a slightly raised quatrefoil; the rest of the field within the rim is occupied with the " feather and curl " design upon a granulated ground. At the beginning of 1926 Karlbeck, describing a mirror of this type, said that " it might almost be called the father of all decorated mirrors " (57, 5, fig. 1). The plausibility of this statement has not been lessened by the many discussions since then about the chronology of design; in fact the fresh criteria tend to support it. Mention has already been made of the large bronze bath or *chien* bearing an inscription to say it was cast by Fu-ch'ai, Prince of Wu (pp. 64, 65). His reign lasted from 495 to 473 B.C., and that gives a date for the kind of design which I call " feather and curl," its main decoration. Having come to light some 70 years ago, the *chien* can hardly be included among " fresh criteria," though it had not been seen by many before the International Exhibition of Chinese Art (No. 581). But several of the bronzes, said to have been excavated recently at Chin Ts'un, have the same style of ornament, and they may be assigned reasonably to the end of the Chou period (*v.* 122, pls. 18, 21, 49, 57, 106, 113, 114). Among

them a good example is the pair of *hu* which, as noted above, bears an inscription without any clearer indication of date than an implied association with the Han State (*v. sup.* p. 48). This State started its official independence in 403 and was extinguished in 230 B.C. In short, the antiquity of No. 18 may equal that of the aforesaid *chien* in the early part of the fifth century B.C., or it may be less.

For more than twenty years the custom was to label the style of design displayed by No. 18 as " Ch'in," and some who used that name seemed uncertain whether they meant the five centuries and a half of the Ch'in State or the fourteen years of the Ch'in dynasty or both. I am not sure how this conveniently vague term started; but its currency was surely stimulated at the time of the Li-yü Find in 1923 by certain writers who supposed that the vessels had been used for sacrifice by the First Ch'in Emperor himself, and afterwards buried nearby. They even gave such a circumstantial detail as 219 B.C. for the date of the ceremony. One asserted that the Find included " an axe-head bearing an inscription with a date corresponding to the year 267 B.C." For the alleged axe-head there seems to have been no more basis of fact than for the rest of the statements, and in 1925 I published a protest against such speculative archæology (131). The " Ch'in style " continued in vogue until the conference at Stockholm in September, 1933, presided over by H.R.H. the Crown Prince of Sweden. The occasion was the Thirteenth International Congress on the History of Art, and the conference followed a notable exhibition in the Museum of Far Eastern Antiquities, the chief aim of which was to provide evidence for a chronological classification of the bronzes. Certain tentative conclusions were afterwards announced by the promoters in an admirable volume commemorating the exhibition (4), and these have been adopted and elaborated by Karlgren in his valuable digest of studies relating to the subject (60).

Most of us thought that the " Ch'in style " designation had died in 1933, yet evidently it survives in the Far East. A mirror resembling No. 18 exactly, except that it is larger, appears among the Liu collection labelled " Ch'in mirror with *t'ao-t'ieh* design " (82, XXIII, 17). The " *t'ao-t'ieh* " must have been a slip on the part of the cataloguer; the most imaginative eye would fail to see a mask among the " feathers and curls." " Ch'in " is clearly intentional; for so he labels 19 other mirrors. Some of them might plausibly be assigned to the Third Phase, others to the Former Han. Last

year a writer in K'ai-fêng published a treatise on mirrors in which he confidently assigns a number to the Ch'in period (104), and I have seen a Japanese book by Umehara, which appeared in 1935, taking the same line. The truth is that evidence to support such an attribution is lacking. On the other hand, there is strong probability that certain types of mirrors were made during the latter part of the Chou period, and this conclusion is based on stylistic analogies. Concerning No. 18 there can be little doubt.

NUMBER NINETEEN A mirror with quaint script *i t'i tzŭ ching* 異體字鏡 Former Han Diameter, 2⅝ inches (6·7 cm.) Plate XXIII *b*

THE name given above is one which fits the numerous class whose main feature is an inscription of characters shaped abnormally to serve a decorative purpose. Another mode of describing No. 19 takes into account the scalloped edging to the central field, for which Japanese archæologists writing in English use the odd term " concatenated arcs." Sometimes catchwords are chosen from the inscription to indicate which of the customary formulas is the one employed. Accordingly, an alternative name for No. 19 is " a *chao ming* mirror, its centre bordered with eight scallops," in Chinese *nei hang pa hua wên chao ming ching* 內行八花文照明鏡.

The inscription of 13 characters is deciphered thus: 內而清而以照明光而象夫日月; and it is translated: " By virtue of its intrinsic purity [this mirror] reflects the light; its radiance is like that of sun and moon." A mirror in the Eumorfopoulos collection has an almost identical inscription, the first part of which I previously translated: " [This mirror] manifests the sincerity of your inmost thoughts " (127, II B 12). But since then Karlgren's remarkable concordance of mirror inscriptions has appeared, giving a rendering which I accept as more straightforward, though a

secondary meaning, as expressed in my former version, may underlie the other. In his study of this formula, Karlgren cites analogous inscriptions to explain why the legend conveys the idea that the mirror's "interior is pure and thereby reflects the light" (58, 21, 22, 26). That involves reading *chao* 昭 "bright" as written for the verb *chao* 照 "to reflect," and since the whole force of the inscription depends on the words *chao ming*, they offer a better choice as catchwords than the *ming kuang* with which Harada elects to designate a similar mirror in the Sumitomo collection (38, No. 7). As often on this class of mirrors, the particle *êrh* 而 is interspersed throughout the inscription somewhat at random and without meaning, apparently to fill out the space.

This gives me the opportunity to revise another inscription, which was published in the Eumorfopoulos catalogue before the treatise by Lo Chên-yü (83) had appeared. It comprises 24 characters; its first half is almost identical with the inscription discussed above, and the mirror design is of the same class (127, II B, 10). Accepting Lo's decipherment, the third character should now be read *chih* 質, and the ninth *hsiang* 象 (*v.* 83, 7). In cryptic fashion it may express the feelings of a mistrusted though loyal retainer or of someone lamenting the faithlessness of a lover. Such was a favourite theme, echoing the famous poem *Li sao* 離騷 which the exiled courtier Ch'ü Yüan 屈原 of the Ch'u State wrote about the end of the fourth century B.C. The qualities of the mirror serve as a simile for qualities claimed by a disgruntled person conscious of unappreciated worth. The amended translation runs: "By virtue of its intrinsic purity [this mirror] reflects the light; its radiance is like that of sun and moon. My heart aspires to prove its loyalty; but it is thwarted and has no vent."

Since this longer formula was in common currency, as proved by its frequent appearance on mirrors, the first part of it may have been used elliptically to imply the whole. If that were so, No. 19 might have served to convey a subtle hint when given by one lover to another whose constancy was doubted, an innuendo in keeping with Chinese habit.

The presence of such mirrors in Han tombs excavated in Corea gives evidence of an early date, and also the thinness and flatness of No. 19 are characteristic, so that it may be assigned to the Former Han period.

NUMBER TWENTY A "hill mirror" *shan ching* 山鏡
Third Phase Diameter, 7¼ inches (18·4 cm.)
Plate XXIV

A CHINESE mode of naming this kind of mirror is adopted here merely for convenience, not with the implication that the repeated figure shaped like the character for the word *shan*, "a hill," has any such significance. No. 20 might just as well be called a "T mirror."

In common with No. 18, here the greater part of the field is occupied by the "feather and curl" design upon a granulated ground. Again there is a quatrefoil, but the petals or leaves are applied to the corners of a central square which is an enclosing frame instead of a seat for the fluted loop. Extending from each point of the quatrefoil is a form difficult to identify, unless it be a stalk of some sort of grain, the bulbous end being its head bowed with the weight of ripeness. Eight other petals or leaves, like those of the quatrefoil, are symmetrically placed round the periphery.

Much of the decoration on No. 20 is matched by the eleventh mirror in Jung Kêng's catalogue (52). On other examples of the so-called "hill" type the number of the slanting 山 or T forms varies from one to eight. In those rare instances when only a single form is present, the middle one of the three parallel elements lies across the centre of the mirror. The forms are guttered and their surface differs from that of the rest of the mirror, being scored and having inequalities such as appear when wax is scraped with a spoon-like tool. Probably, therefore, this mirror was cast by the *cire perdue* method, the wax model being moulded in a clay mould on which the rest of the design had been imprinted with dies.

The thinness and flatness of No. 20 and the fluted loop are early characteristics. Arguments that have been advanced concerning the "feather and curl" design on No. 18 apply here also, and accordingly this mirror may be assigned to the fifth or fourth century B.C.

NUMBER TWENTY-ONE Support for unknown object Probably Han Height, 1¾ inches (4·4 cm.)
Plate XXV *a* and *b*

THE bear became a favourite motif in Chinese art of the several centuries before and after the beginning of our era. Supports or legs for various objects were often fashioned in the form of a bear. Two vessels so furnished appear in the catalogue of the Sung imperial collection: one a cooking-dish of the class called *chiao tou* 錐斗, the other a *lien* used for purposes previously mentioned (*v. sup.* pp. 40, 77). Concerning the first, which is assigned to the Han period, the authors remark that the figures manifest an ancient notion. "The bear," they say, "is a lucky omen of the begetting of sons by reason of its endurance and ability (*nêng* 能)." They mention again that the bear augurs well for male offspring in their description of the *lien* which, so far as can be judged from the woodcut, was surely later than the Chou period assigned to it (118, XX 7; XXVII 18, 19). When alluding to the antiquity of such ideas, probably they had in mind a song in the *Shih ching* which describes the building of a palace for a noble, who awaking in his new surroundings, says:—

> "'Divine for me my dreams.
> What dreams are lucky?
> They have been of bears and grisly bears;
> They have been of cobras and [other] serpents.'
>
> The chief diviner will divine them.
> The bears and grisly bears
> Are the auspicious intimations of sons.
> The cobras and [other] serpents
> Are the auspicious intimations of daughters" (74, IV 306).

This train of thought led to more than mere recognition of the bear's qualities as fitting it to symbolize masculine virility. The word *nêng* 能 came to be used both for the animal and for its qualities. In the *Shuo wên chieh tzŭ* there is this entry under the "Small Seal" form of *nêng*, determinative 380: "A sort of bear with feet like a deer's. [The character is]

composed with *jou* 肉 and *i* 㠯 as a phonetic. Because the *nêng* is one of the strongest of beasts, there is the term *hsien nêng* 賢能 [for superior ability], and because of its extraordinary powers, there is the term *nêng chieh* 能傑 [for one who is a hero]." To this a note is added by members of the imperial commission whose re-edition of A.D. 986 is the extant text. It says: "*i* 㠯 is not the phonetic; we suspect that the whole [character] is a pictogram" (49, X A, 7). They are probably right and the original author is wrong, though evidently neither the "Small Seal" form nor its supposed archaic

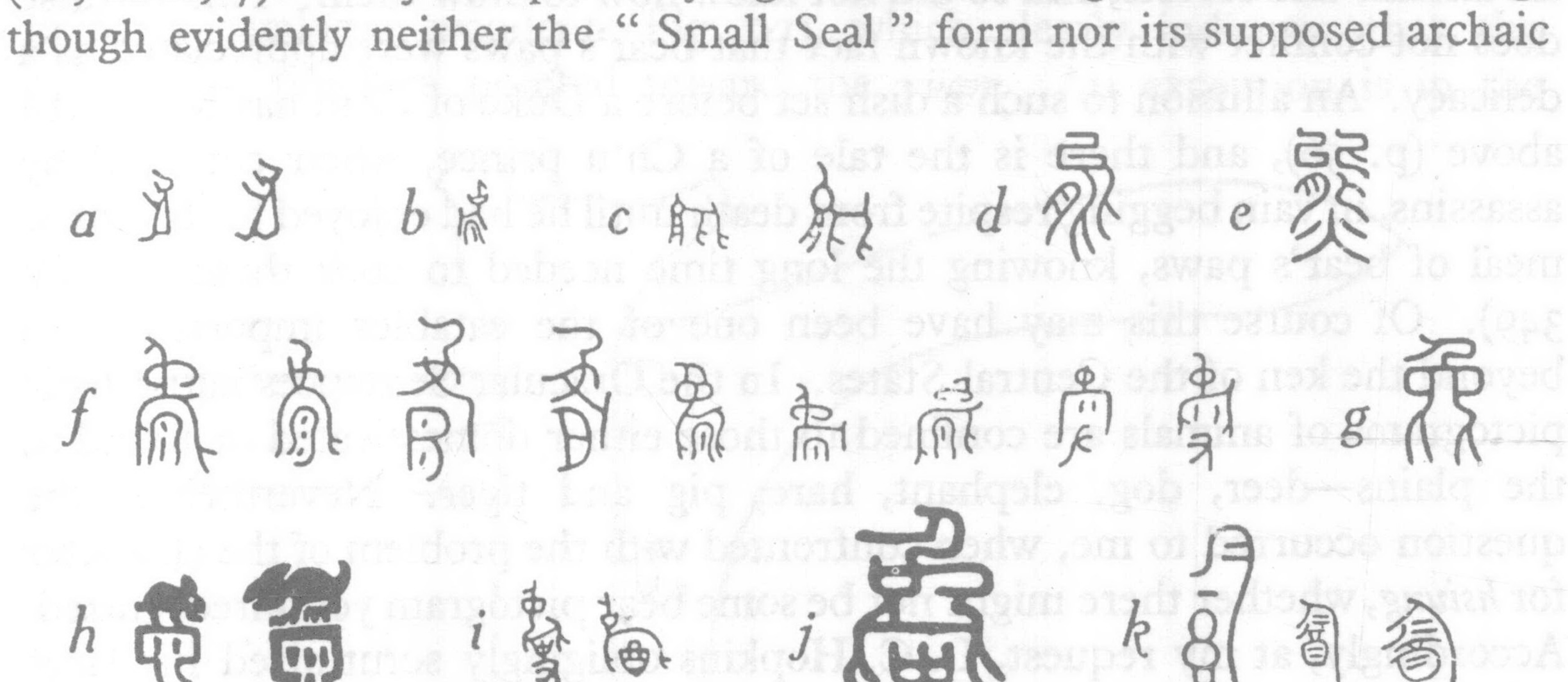


FIG. 25 Various characters (about half actual size): *a*—Of doubtful Shang-Yin age; from inscribed bones in the Hopkins collection *b*—Supposed form of *hsiung* from an Oracular Sentence (*v.* **26**, X 6) *c*—Supposed forms of *nêng* on archaic bronzes, copied from **51**, X 3 *d* and *e*—"Small Seal" forms of *nêng* and *hsiung*, respectively, in the *Shuo-wên* *f*—Supposed forms of *hsiung* on archaic bronzes, copied from **51**, X 3 *g*—"Small Seal" form of *ch'o* in the *Shuo wên* *h*—From archaic bronzes, copied from **85**, XIV 37; XV 4 *i*—From certain Hsing bronzes (*v.* **64**, 16–19) *j*—From the second of the Stone Drums *k*—Forms of Yen from Ch'u bronzes (*v.* p. 92)

forerunner (Fig. 25 *d*, *c*) depicts a bear. The pronunciation given in the extant text of the *Shuo wên* is *nêng*. In ancient times this character stood also for the word *nai* which denoted a three-legged turtle (*pieh* 鼈), as defined in some dictionaries, for instance the *Êrh ya* (3, IX 20). But the pictogram (Fig. 25 *c*) is even less like a turtle than a bear. The same kind of quadruped appears in the *Shuo wên* determinative 381 which stands for *hsiung* 熊, the ordinary term for a bear, described as "a beast like a pig which lives in the hills and hibernates." In structure the character

(Fig. 25 *e*) is said to be " composed with *nêng* 能 and a shortened form of *yen* 炎 as phonetic " (**49**, X A, 7).

When all the supposed forerunners of the " Small Seal " form of *hsiung* are passed in review, we find one which looks like the pictogram of a long-legged quadruped combined with another element (*v.* Fig. 25 *b* and *f*). Its legs resemble those generally found in realistic pictograms used in the Oracular Sentences for writing the words " deer " (*lu* 鹿 and *mi* 麋) and " hare " (*t'u* 兔), animals of a build quite distinct from a bear's (*v.* **26**, X 2-4).

Probably the belief hitherto held that these characters (*b* and *f*) were prototypes of *hsiung* (*e*) is erroneous. They might more plausibly be correlated with a form which appears as determinative 374 in the *Shuo wên* (*g*), and is stated there to be a pictogram portraying " an animal like a hare as to its glaucous colour, but it is larger ; its head is the same as a hare's and its feet are the same as a deer's " (**49**, X A, 4). This creature, called *ch'o* 㲋, is perhaps a small kind of deer. An attempt at zoological identification is made by Kuo Mo-jo and T'ang Lan when they recognize two naturalistic animal drawings as variants of the forms previously taken to be forerunners of *hsiung* (Fig. 25 *e*). These drawings, inscribed on bronzes, are copied in Fig. 25 *h*. Clearly they represent an animal like a hare. Kuo Mo-jo transcribes them in current script 彔, which he equates with the three characters copied in *i* and *j*, and regards them all as modes of writing a name or word pronounced *po*. When applied to a locality the name may perhaps be identified with Pu 濮, a tribe situated south-west of the Ch'u State (**64**, 16-19). Kuo's essay hardly disposes of the problem, however, since there are two distinct types involved : one a hare-like creature, the other a deer if judged from the general resemblance between the forms in Fig. 25 *b*, *c*, *f*, *i* and those in the Oracular Sentences which unquestionably represent deer. My efforts to reconcile with nature the supposed combination of these two types have failed ; but the point most important for the present thesis is, I think, proved, and that is the absence of any picture of a bear among the forms copied in Fig. 25 *b-j*.

If this conclusion be right, we are left with the task of discovering the real forerunners of the character 熊 which for more than two thousand years has been recognized as the correct way of writing *hsiung*, " bear." Classical texts fail to provide decisive criteria, because of the transcribing and editing

they underwent during the Han period and later. At all events, they help the inquiry to the extent of showing that there was some variability in the writing of the word. For instance, in both the *Ch'un ch'iu* and *Tso chuan* the clan-name of Hsüan's 宣 mother is given as Ying 嬴 (**74**, V 300-302), while the commentaries by Ku-liang and Kung-yang agree in writing Hsiung 熊 (**61**, XII 9 ; **63**, XV 18, 19). Again, the name of a Ch'u official is written Ch'êng Hsiung 成熊 in the *Ch'un ch'iu* (**74**, V 635, 638), but Ch'êng Jan 然 in the *Kung-yang chuan* (**63**, XXII 20).

We are on surer ground when seeking evidence from inscriptions on Ch'u bronzes which name members of the ruling family. For example, a bell has 34 characters which were recorded by Sung epigraphists. The inscription begins with the statement that Yen Chang 酓章, King of Ch'u, had the bell cast in the " King's fifty-sixth year." Now, within historical times there is only one king of Ch'u who reigned so long. He is King Hui 惠, and his personal name is known to be Chang. As to the identity of the person named in the inscription there can be therefore no doubt. Nor can the " Yen " but stand for its ancient homophone " Hsiung," a family name of the Ch'u rulers. The date, by the way, corresponds to 433 B.C. Unfortunately only copies of Sung copies of the inscription are now available, and probably they do not imitate the original faithfully. But this particular character, the first in Fig. 25 *k*, is proved to be fairly correct by comparison with other inscriptions on a number of Ch'u bronzes recently excavated near Shou Hsien, the site of the last Ch'u capital (*v.* **66**, 179, 183, 184). From them two later versions of " Yen " are copied second and third in *k*. On a sword the " Yen " precedes " Chang " as on the lost bell ; and on several of the vessels it precedes one or other of two characters concerning which there has been much dispute ; but Kuo Mo-jo's equation with the personal name of King Yu 幽 (237-228 B.C.) seems to accord with the balance of evidence (**65**, 165, 166, 168-170).

As an outcome of the foregoing one may conclude that the word *hsiung*, " bear," probably was not written with a pictogram of the animal during the latter part of the Chou period. Instances of the word when used as a traditional name adopted by the rulers of Ch'u provide good criteria, because had a distinctive pictogram for the word been current, surely the family would have preferred to inscribe it on their bronzes. And this argument is especially cogent, if they had regarded the bear as a sort of totem or emblem.

But we find them using a character whose only affinity with *hsiung* was that it stood for a word of like sound. Also there are the afore-mentioned instances in classical texts of the homophones *ying* and *jan* being borrowed for *hsiung*.

Perhaps the solution of the problem is that the inventors of Chinese script, dwellers on the plains, were unfamiliar with live bears, shy creatures of mountains and forests, and so did not know how to draw them. This surmise does not conflict with the known fact that bear's paws were appreciated as a delicacy. An allusion to such a dish set before a Duke of Chin has been cited above (p. 56), and there is the tale of a Ch'u prince, when cornered by assassins, in vain begging respite from death until he had enjoyed his favourite meal of bear's paws, knowing the long time needed to cook them (**19**, IV 349). Of course this may have been one of the eatables imported from beyond the ken of the Central States. In the Oracular Sentences naturalistic pictograms of animals are confined to those either domesticated or found in the plains—deer, dog, elephant, hare, pig and tiger. Nevertheless, the question occurred to me, when confronted with the problem of the character for *hsiung*, whether there might not be some bear pictogram yet unrecognized. Accordingly, at my request, L. C. Hopkins obligingly scrutinized his large collection of inscribed bones and tortoise-shells, and found two animal forms which look remarkably like bears (Fig. 25 *a*). Even though there is doubt as to the authenticity of the respective inscriptions, the two supposed bears may have some evidential value, because nearly all the faked inscriptions are composed of characters copied from genuine originals. The problem remains whether a bear pictogram really was written by the Shang-Yin scribes, and, if so, whether it stood for *hsiung*. Also the forerunners of the character with which *hsiung* has been written for more than two thousand years have still to be explained.

The advent of bears in Chinese art may not have been the outcome solely of a national propensity for symbols and puns. It seems to have occurred about the fourth century B.C. when the Yen 燕 State annexed the region corresponding to southern Manchuria and northern Corea, thus bringing Chinese into contact with the Tungus inhabitants. Chinese familiarity with these parts grew with the incorporation of the region in the Ch'in empire, and became still closer after the Han Emperor Wu's conquest of 109 B.C. which opened the way for Chinese colonization on a large scale.

Doubtless the Tungus of those days had the same notions about bears as their descendants in common with other forest dwellers over wide tracts of the northern hemisphere. The bear is revered because of many characteristics. It is hardy, strong, courageous, and its habit of hibernation without food is mystifying to the untutored mind. Like man it is omnivorous ; at times it walks erect or sits against a tree in postures almost human ; its footprints resemble a man's ; if attacked it whimpers and sheds tears ; and when skinned its body presents human proportions (*v.* **35**).

Apart from bear supports which are cast in one with bronze objects, such as those cited from the Sung catalogue, there are many pieces, like No. 21, which were made separately and attached by means of pin and perforated tang. The objects thus supported were no doubt made of perishable material ; that would explain their disappearance and the survival of numerous separate bronze bears which, as their shapes indicate, were designed for attachment. From a Han tomb in Corea, for instance, four such bears have been excavated, together with studs and angular corner pieces which originally must have served as the metal fittings to some sort of wooden table. Each bear support has a tubular socket behind it in place of the perforated tang of No. 21, and some of these sockets still contain remnants of wood. Among the finds in Corea are pieces like No. 21 (*v.* **95**, Text : figs. 265-270 ; Plates : figs. 403-414, 472-476).

While evidence available from the few scientifically excavated Han tombs prove that such pieces as No. 21 existed in the Han period, there is at least one bronze which establishes an earlier date for the bear motif. I refer to the lower half of a *tui* 錞 from the Jehol palace collection, which has three bear supports of much the same type as No. 21 (**55**, 78, 80). Its inscription of 36 characters is dated in the fourteenth year of Wu Marquis Ch'ên 陳侯午 of the Ch'i State. He is identified with the ruler whose posthumous name was Huan Kung 桓公. Ssŭ-ma Ch'ien states that he died in the sixth year of his reign (**19**, V 241) ; but actually he seems to have reigned for eighteen years, and his fourteenth year was either 362 or 371 B.C., according to the chronology of the *Bamboo Books* or that of the *Shih chi*, respectively (*v.* **65**, 216-219). So No. 21 might have been made a century or two before the Han, though in the light of present knowledge the label " probably Han " is suitable.

NUMBER TWENTY-TWO Ornament for *ko* 戈 haft
Third Phase Length, 3 inches (7·6 cm.) Plate XXV *c-e*

INLAID with silver, the decorative pattern on this ornament is one that appears in the latter part of the Third Phase. Analogies are to be found among the objects said to have come from Chin Ts'un (see especially 122, fig. 016). A ring of thin gold foil surrounds the pupil of each eye. The body of the bird is hollowed to receive the haft end, and it is perforated on either side for a pin which, transfixing the haft, held the bird in place. Fig. 26 shows the rim to be oval with a gap at the more pointed end. Evidently the gap or notch was for the blade of the weapon (*cf.* Plate XXV *c*). Judged by its size, No. 22 seems likely to have belonged to a *ko* used as a dagger-axe in the manner to be described presently.

The hooked beak suggests a bird of prey, an eagle or hawk. If we seek the train of thought which prompted the choice of this kind of bird as a suitable ornament for a *ko* haft, we find it in the primitive and universal belief that like produces like. The eagle or hawk is proverbially keen-sighted and quick to strike its prey with deadly effect. Its figure on the haft is therefore not merely ornamental; it tends also to endow the weapon with qualities of the bird, so that the owner may slay his enemy with unerring aim. Here is an instance of sympathetic magic, and it is displayed again in No. 24. Indeed, these *ko* ornaments may be linked also with notions concerning the pigeon emblem about which much is said later (No. 24). Writing in the first century, Wang Ch'ung remarks a strange belief. He says: "Sometimes during a peaceful administration and, while the fluids are in harmony, various creatures undergo a metamorphosis. In spring, *e.g.*, the eagle changes into a pigeon, and in autumn the pigeon becomes an eagle" (32, I 368).

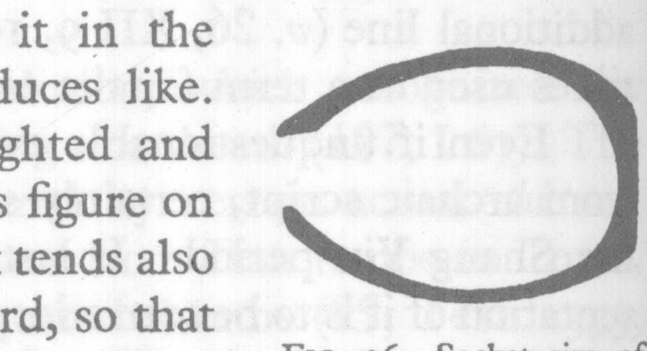


Fig. 26 Socket rim of No. 22 Actual size

Nevertheless, this hardly explains why two bronze objects are described in the *Po ku t'u lu* as "head and butt of a Han pigeon-staff (*Han chiu chang shou tui* 漢鳩杖首鐓)." The woodcut illustration, reproduced in Fig. 27, shows clearly that they are really *ko* furniture; for the piece on the right is a bird ornament with an unusually tall socket, slotted for the *nei* of the

weapon, and grooved vertically on its left side for the *yüan* and *hu*. These technical terms for parts of the *ko* may be understood on reference to Fig. 31; and the manner of fitting the ornament to the *ko* is apparent from Fig. 29, in which, however, the bird itself is differently represented. On the left of Fig. 27 is the butt, evidently of the kind excavated in numbers during recent years. They are oval in cross-section and therefore intended for a

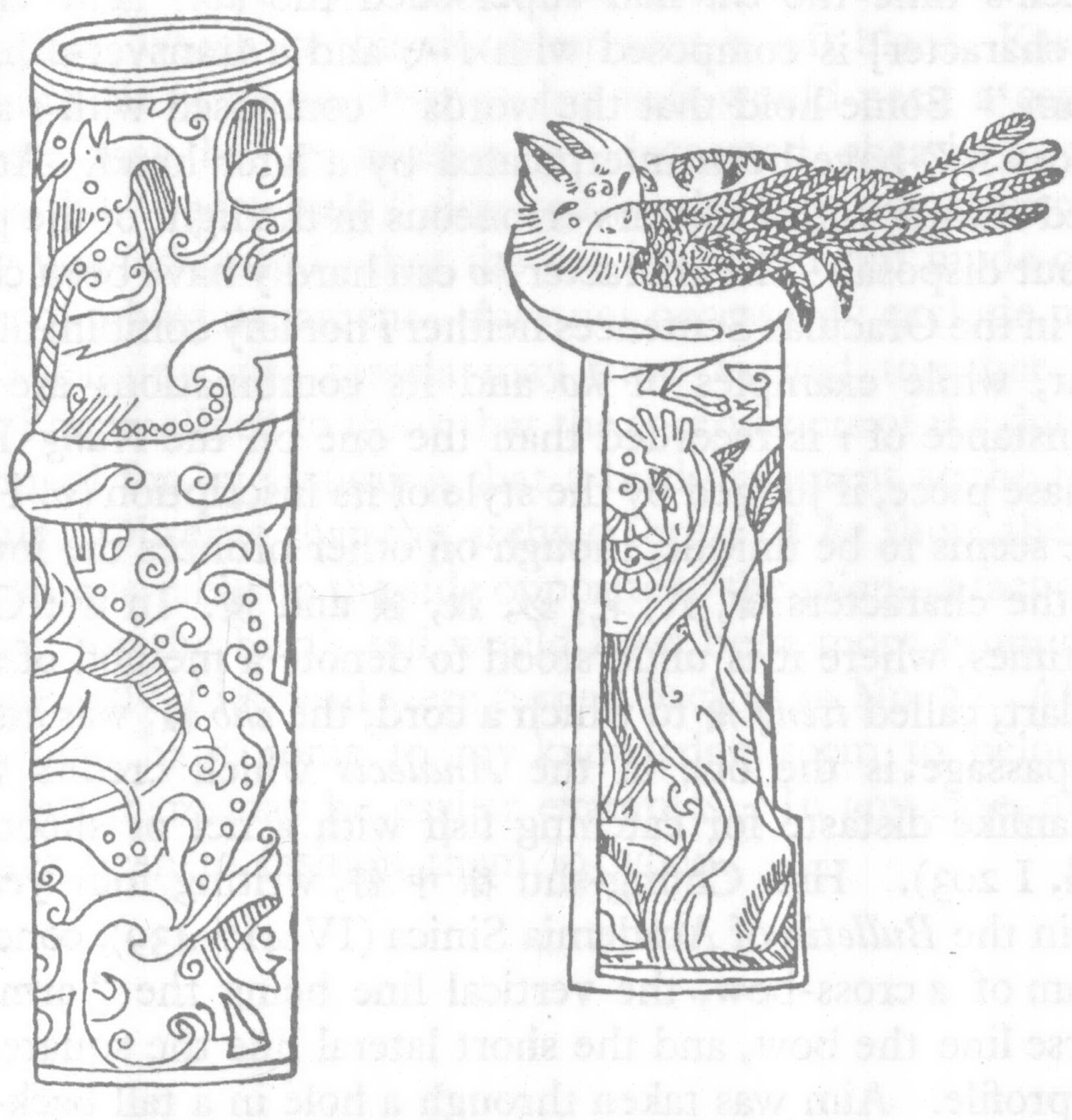


Fig. 27 Woodcut in the *Po ku t'u lu* (118, XXVII 14)

striking weapon as will be explained later. In short, the cataloguers made the mistake of confusing these fittings for the haft of a *ko* with quite a different thing—the emblem of the pigeon-staff conferred on the aged, an example of which is No. 24 in this Collection. They seem to have been wrong, too, concerning the period. For one reason, the *ko* went out of use about the beginning of the Han, being superseded by the *chi* 戟 which had a vertical point continuing the line of the haft in the place formerly occupied by the

bird ornament of the *ko*. Also, the decoration figured on the two pieces looks like a Third Phase design, misrepresented through either faulty draughtsmanship or the vagaries of copyists. The mistakes made in the Sung catalogue were repeated by Ch'ien Tien at the end of the eighteenth century when he called the piece represented in Fig. 28 "the head of a Han pigeon-staff," and discussed it as quoted below (p. 107). A problematic link with the pigeon may be found in my surmise that certain military officials were entitled to carry a pigeon-staff combined with a *ko* (*v. inf.* p. 111). Still the piece described by Ch'ien Tien is certainly not "the head of a Han pigeon-staff," but a *ko* ornament like No. 22, except that it has a tall socket, presumably oval in cross-section, for ensheathing the top of the wooden haft. Observe that the bird's beak is large, hooked and predatory, and that the back-turned head gives to the form that compactness which is appropriate to its position at the end of the haft. Doubtless the purpose was to avoid a pointed projection where it was liable to get damaged or inconveniently caught on coming into contact with other things.

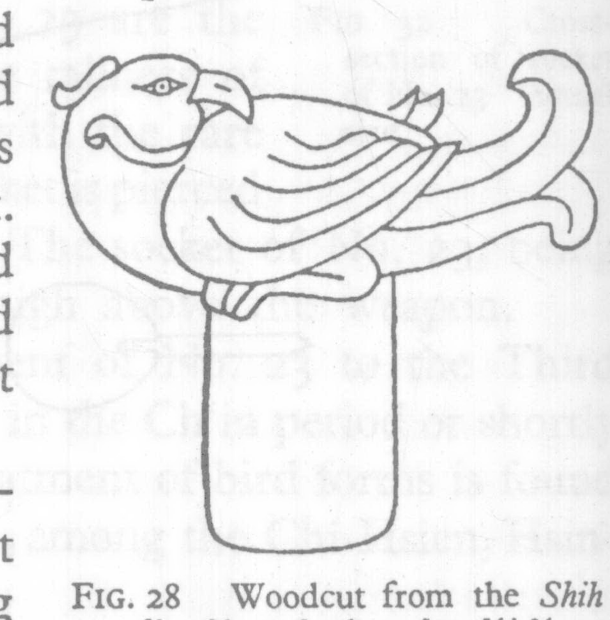


Fig. 28 Woodcut from the *Shih liu ch'ang lo t'ang ku ch'i k'uan chih k'ao* (25, IV 4)

A haft fashioned so that it is oval in cross-section has been remarked above as the sort customarily designed to serve for the striking weapons. This shape allows of a firm hold, and it helps to ensure that the blow is aimed with the blade pointing in the right direction. We in the West flatten the hafts of our axes or the grips of our swords for similar reasons; but the Chinese carried the device further by making the hafts oval in cross-section, putting the narrower end of the oval next the *yüan* or pointed blade of the *ko*. Thus even in the dark, by the feel of the haft, they were enabled to differentiate between *yüan* and *nei*, and so could strike fair and square with either.

Evidence that the rule was for the head-end of the bird to point toward the *yüan* is usually lacking, because, the perishable wooden haft having disappeared, the bird ornament and the *ko* are found lying apart. Fortunately certain examples are known which provide the missing clues. For instance, Mr. O. Karlbeck tells me of one in the collection of the Crown Prince of Sweden. It has a bird ornament, shaped somewhat like No. 22,

which corrosion products have caused to adhere *in situ* to the upper edge of the *ko*, the wood having perished. There are other examples which still have in place a bronze sheath designed to strengthen the several inches of the wooden haft where it articulates with the *ko*. These sheaths are of course oval in cross-section, and the narrow end of the oval is on the side of the *yüan*. In some examples the bird and sheath are joined so that the latter may be termed the socket of the ornament. Such is the piece represented in the Sung catalogue woodcut (Fig. 27), which clearly indicates that the head-end of the bird pointed toward the *yüan*. An exception is in the

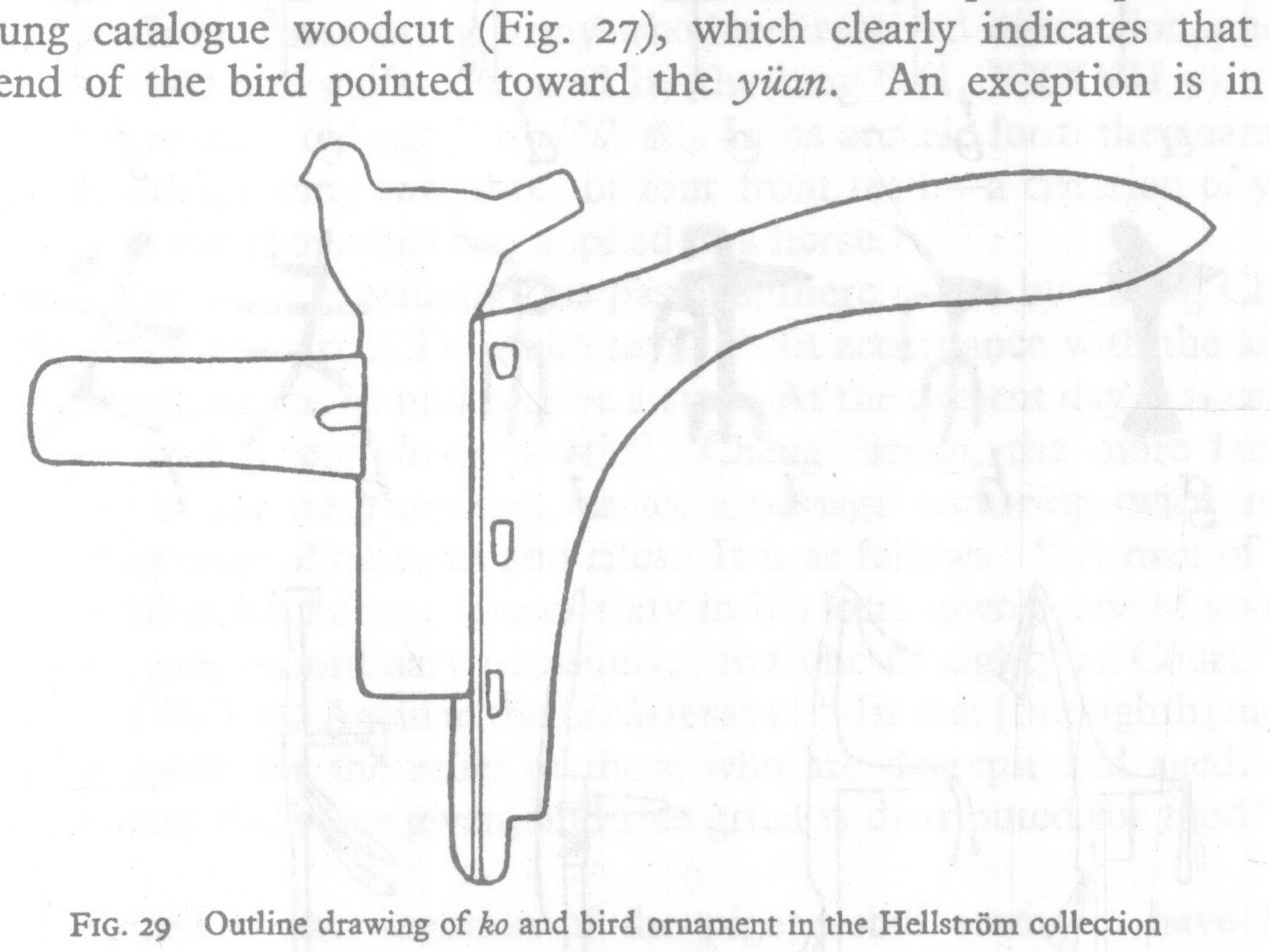


Fig. 29 Outline drawing of *ko* and bird ornament in the Hellström collection

Hellström collection, and I have drawn it in outline (Fig. 29). Here the bird looks the other way; but the socket is lentoid in cross-section and the *nei* has a cutting edge. These facts taken together are significant, because a sharpened *nei* characterizes the latest type of *ko*, and probably such a *nei* was used interchangeably with the *yüan* as the striking part of the weapon. Indeed, the *nei* may have been preferred for striking blows, while the *yüan* was used chiefly for hooking and cutting. If that were so, the direction of the bird's head on the side of the *nei* accorded with notions of sympathetic magic.

Next to be discussed is the question whether the presence of the bird

ornament may be traced in the character used to write the term *ko*. It is worth investigating, because the form of this character is puzzling, and the upper part of it has never been explained satisfactorily. The *Shuo wên* definition is that a *ko* is a *chi* 戟 which has a level or horizontal head (49, XII B, 6). Such an explanation implies that then the *chi* was well known while the *ko* was not, and indeed archæological evidence proves that long before Hsü Shên's time the *chi* had superseded the *ko*. The entry continues: "[The character] is composed with *i* 弋 and a transverse line across it. A pictogram." Some hold that the words "composed with *i* and a transverse line across it" have been interpolated by a later hand. At all events, the supposed affinity with *i* appears erroneous in the light of the plentiful criteria now at our disposal. The character *ko* can hardly have been composed with *i*, because in the Oracular Sentences neither *i* nor any combination of it is known to occur, while examples of *ko* and its combinations are frequent. No earlier instance of *i* is recorded than the one on the *Nung Yu* 農卣, a later First Phase piece, if judged by the style of its inscription (*v.* **110**, V 84). This example seems to be unique, though on other bronzes the form *i* is found as part of the characters 宓, 㚤, 杙, 必, 叔, 鈇 and 庚. In the Classics *i* occurs several times, where it is understood to denote a method of shooting with a sort of dart, called *tsêng* 矰 to which a cord, the *cho* 繳, was attached. A well-known passage is the one in the *Analects* which credits Confucius with sportsmanlike distaste for catching fish with a net or shooting at a sitting bird (**74**, I 203). Hsü Chung-shu 徐中舒, writing four years ago on this subject in the *Bulletin* of Academia Sinica (IV 417-439), concludes that *i* is a pictogram of a cross-bow, the vertical line being the "arm" (*pei* 臂), the transverse line the bow, and the short lateral line the square sighting-frame seen in profile. Aim was taken through a hole in a tall back-sight, a central point within the sighting-frame being aligned with the quarry. Several terms were used for the frame: *shih* 式, *tu* 度 or *i piao* 儀表. Whether Hsü Chung-shu is right or not in his explanation of the character *i*, beyond doubt the kind of missile implied by this term was used during the Shang-Yin period. A number of unidentified pictograms in the Oracular Sentences have as one element a dart with a cord at its blunt end; and there are the archaic forerunners of such characters as 弗, 叔, 弔, 雉 and 陵, which include a representation of a coiled cord, evidently the *cho*, like the form occurring alone as *chi* 己, sixth of the "Ten Stems." Kuo Mo-jo also explains *chi* thus

(**67**, 9), but Hopkins argues that it depicts a kneeling human figure viewed in profile (**48**, Pt. VI 421-427). In the *Shuo wên* (**49**, XIV B, 5) the account of *chi* is as unsatisfying as it is concerning the rest of the "Stems."

Another indication that cross-bows were used in the Shang-Yin period is the presence of numerous red-clay pellets among the An-yang finds. Hsü Chung-shu regards them as cross-bow ammunition, and he cites as additional evidence the pictogram generally recognized as the archaic form of *t'an* 彈 "to shoot pellets." The latter is, by the way, the word used in the *Tso chuan* narrative about the prince who amused himself by taking shots at his subjects (*v. sup.* p. 56; **74**, V 288, 290). Yet the archaic forms of *t'an* look like an ordinary bow with an enlargement in the middle of the string, doubtless the pellet pouch (**26**, XII 10). According to Hsü Chung-shu, the sinuous form which is equated with *hung* 弘 depicts a cross-bow. If that be so, it must have been the kind with an undulating "arm," in contrast to the kind with a straight "arm" which *i* 弋 is supposed to represent. Moreover, the *hung* pictogram resembles the one for *kung* 弓, except that it has an additional line (*v.* **26**, XII 9, 10). It is true, however, that *kung* was sometimes used as a term for the cross-bow as well as for an ordinary bow.

Even if unquestionable evidence for the cross-bow is not forthcoming from archaic script, certainly shooting with dart and cord was practised in the Shang-Yin period. It lasted until after the Han. An excellent representation of it is to be seen adorning a four-handled *yü* 盂 in the Freer Gallery, which dates from about the fourth century B.C. Men shooting at cranes with cross-bows are figured thereon, and clearly there is a weight or ball on that end of the cord which is not attached to the dart. A dart aimed ahead of a flying bird might miss it and yet the trailing cord entangle it, bringing it down.

Enough has been said to establish the fact that the structural evolution of *ko* did not start from the pictographic archetype of *i* 弋. Perhaps it was not Hsü Shên's intention to imply that, but merely to remark a close superficial resemblance. Certainly he was right when he called the character *ko* a pictogram, as may be seen by comparing the "Small Seal" and current forms with their archaic forerunners. Clearly they are direct descendants of realistic drawings of the weapon complete with haft and butt-cap (*v.* Fig. 30 *a-j*). Examples from the Oracular Sentences are cut summarily in linear fashion (*a-f*), while those on the bronzes are represented solidly (*g-j*),

both methods being in accordance with the respective techniques. After looking at *h*, *i* and *j*, the origin of the oblique cross-line in *k* and *l* becomes apparent. It depicts two of the three prongs at the end of a *ko* haft. As remarked before, Karlbeck reported in 1925 many such butt-caps which had been dug up in the Huai region (*v.* **127**, I 67).

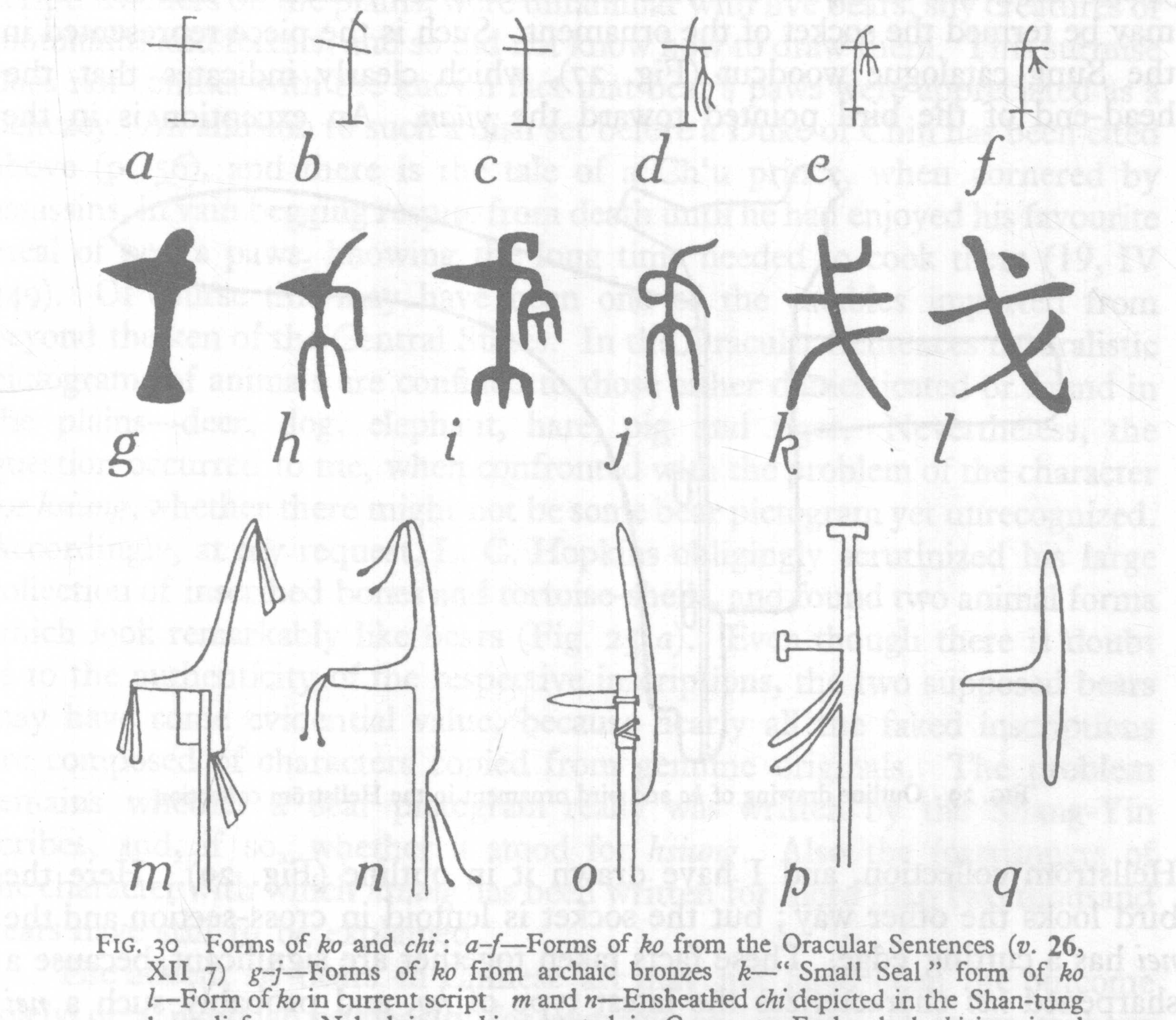


FIG. 30 Forms of *ko* and *chi*: *a-f*—Forms of *ko* from the Oracular Sentences (*v.* **26**, XII 7) *g-j*—Forms of *ko* from archaic bronzes *k*—"Small Seal" form of *ko* *l*—Form of *ko* in current script *m* and *n*—Ensheathed *chi* depicted in the Shan-tung bas-reliefs *o*—Naked iron *chi* excavated in Corea *p*—Ensheathed *chi* imprinted on tomb brick *q*—*Chi* type of dagger-axe depicted in the Shan-tung bas-reliefs

As to the bronze weapon itself, apart from the haft and accessories, it is the primitive *ko* which is portrayed in the archaic forms of the character (Fig. 30 *a-j*). Straight and flat, pointed at one end, blunt at the other, presumably its prototype was stone. An essential feature is the mode of

hafting; the blunt end passes through a slot in the haft, a modification of the cleft stick device. Without a socket, the *ko* called for the simplest casting, no core being needed. There is also the *ch'ü* 鑺, a weapon of

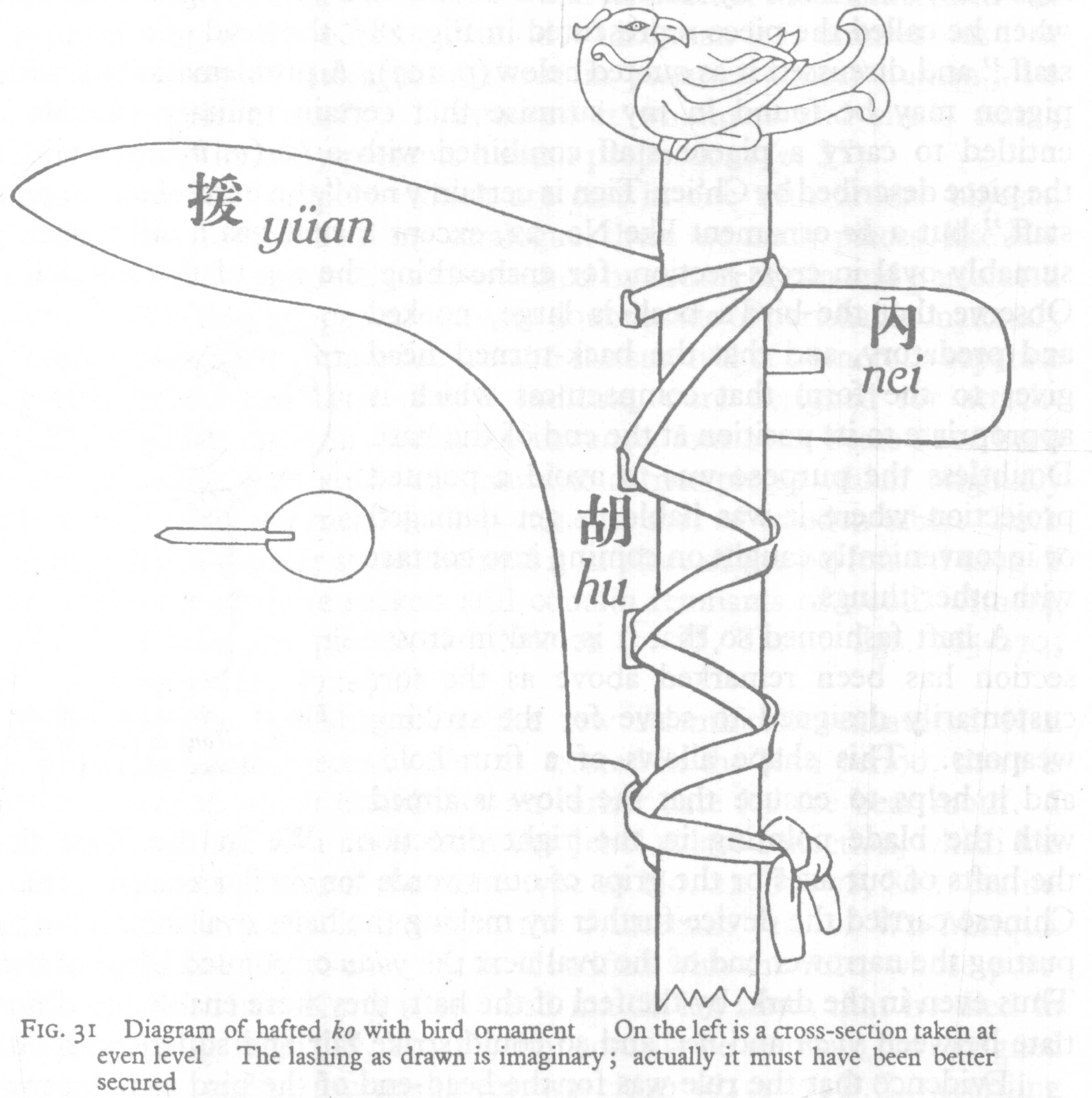


FIG. 31 Diagram of hafted *ko* with bird ornament On the left is a cross-section taken at even level The lashing as drawn is imaginary; actually it must have been better secured

similar shape but socketed. A type of *ko* with wings embracing the *yüan* side of the haft may be regarded as intermediate. Evidently the primitive bronze *ko* with the slot mode of hafting proved wanting, because after several centuries it underwent change. The base of the pointed end was enlarged, made to fit into a vertical groove on the side of the haft, and

perforated. For obvious reasons, this addition was called *hu* " dewlap." From the diagram in Fig. 31 may be seen how the *hu* not only strengthened the pointed end or *yüan*, but extended its cutting edge and provided extra hold for the thong. The slot in the *nei* may have been for a wedge to keep the articulation tight, or for the thong or perhaps for both together.

We have now reached a point in the discussion when the most difficult problem of all remains to be investigated. Every part of the current form of *ko* has been accounted for except the dot. On turning to the archaic and " Small Seal " forms (Fig. 30 *a-k*), the forerunner of the dot appears variously represented as a crook, a lateral projection or merely an inclination of the haft top. This something could hardly have been part of the haft itself; for that would have introduced a complication out of keeping with economical mass production. A straight haft is a simple matter; but for its end to have been shaped outside the straight would have involved extra expenditure in labour and material. The conclusion is that a cap, perhaps bird-shaped, was the thing added—an advance on the means used to secure the ends of the cleft stick archetype.

Some years ago I ventured another solution, which recognized the something as the thong-ends or tassel belonging to a sheath (127, I 67). The idea was based on a supposed analogy offered by certain actual *chi* and pictures of others. The former were excavated from Han tombs in Corea, and they have their blades protected by lacquered sheaths (95, Text: 353, 354; figs. 209-216). In Fig. 30 *o* one of these *chi* is drawn; and *m* and *n* copy ensheathed *chi* carried by soldiers depicted in the Shan-tung bas-reliefs (20, figs. 45, 47, 48, 50, 107, 118, 130, 131). Like the latter are the halberds of the sentries often stamped on tomb bricks of the Han period with the characters *mên t'ing chang* 門亭長 (" beadles of the gates ") inscribed beside them. An example, formerly in the Eumorfopoulos collection, is in the British Museum (Fig. 30 *p* and 44, I pl. 13, fig. 81); but here a curious addition to the point of each blade appears, seemingly an extra guard to protect the point from injury. Observe that the *chi* copied in *m*, *n* and *p* have tassel-like adjuncts which apparently are the pendant ends of thongs or cords used to lace together the sheaths. May we not reasonably assume that bronze *ko*, forerunners of the iron *chi*, were protected with similar sheaths when not in action? At all events, some of the archaic pictograms display thong-ends or tassel pendant from the *nei* (Fig. 30 *d*, *f*, *h-j*); in

one the tassel hangs from the top of the haft (*e*). On bronzes there is a type of inscription which describes the investiture commemorated by the casting of the piece, and among the insignia bestowed upon the recipient of the honour certain *ko* furniture is named. The fullest specification of these objects is conveyed in a formula of seven characters: 戈琱㦸□必彤沙 which Kuo Mo-jo takes to mean " *ko* with ornamented *yüan*, bamboo haft and red tassels " (68, II 78-95). But these terms are somewhat obscure; the fourth character, which in this decipherment is left blank, Kuo equates with *lu* 籚. A bundle of bamboo strips for haft would need a cap to hold the ends. There may be an allusion to decorated sheaths; the least doubtful item is the " red tassels " denoted by the last two characters.

The theory now advanced—that the dot in the current mode of writing *ko* is the vestige of a bird ornament—does not necessarily exclude my earlier explanation. Sheathing and tassels may have existed together with the ornament. But I am inclined to think that the forerunners of the dot are more plausibly accounted for by assuming that a bird ornament at the top of the haft was the rule. Observe that the archaic forms of *ko* show the crook or projection almost invariably on the side opposite to the *yüan*—a fact consistent with the theory; for the bird's tail would have been more prominent than its fore-part, especially if its head were turned back as in No. 22. All of these bronze birds, which have come to my knowledge, seem to belong to the Third Phase; but there may be earlier examples. In any case, at first the custom may have been to fashion them in wood.

NUMBER TWENTY-THREE Ornament for *ko* haft
Third Phase Height, 2¾ inches (7 cm.) Plate XXVI

EVIDENTLY this was made for a *ko*, since the socket is oval in cross-section (Fig. 32). Such is the size that the haft to which it was fitted must have been too slender to have served even for the smaller *ko* if used as a

weapon. I refer to the short-hafted, dagger-axe kind, intended for close fighting. Its grip can have been hardly more than about 6 inches long, if its successor of the *chi* type may be taken as criterion. In several of the Shan-tung bas-reliefs the latter appears as well as the halberd form which naturally would have required a stouter haft (*v.* 20, figs. 109, 130, 132, 137). One of the short-hafted kind is copied in Fig. 30 *q*. The conclusion is that No. 23 was fitted to a miniature, presumably intended for ceremonial or symbolic use.

A fact to be noted is that the bird's head is on the same side as the narrower end of the oval socket. It follows that the *yüan* also pointed in that direction—all according to rule. Unusual features of No. 23 are the position of the head, looking forward, and the tallness of the socket. It has both features in common with the rare piece represented in Fig. 29, but the latter's socket is pierced and grooved for articulation with the blades. The socket of No. 23, being intact, must have raised the bird unusually high above the weapon.

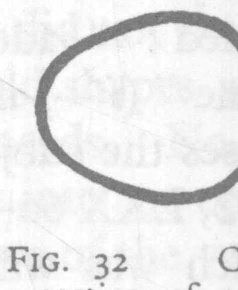


FIG. 32 Cross-section of socket of No. 23 Actual size

Two considerations warrant the assignment of No. 23 to the Third Phase. One is the fact that *ko* became obsolete in the Ch'in period or shortly afterwards, and the other is that analogous treatment of bird forms is found in certain bronzes known to be pre-Ch'in, *e.g.*, among the Chi Hsien, Hsin-chêng and Li-yü Finds.

NUMBER TWENTY-FOUR A pigeon-staff head
Han Height, 3¼ inches (8·25 cm.) Plate XXVII

MANY examples of the staff head in the form of a pigeon have survived. Some, like this one, resemble clay figures found in Han tombs; for others the criteria as to date are not so certain. There is written evidence

that under the Former Han the custom was for such a staff head to be conferred on the aged as an honorific emblem. While several passages in pre-Han texts mention " old-age staffs," they say nothing about the pigeon. For instance, the *Chou li* in the section concerned with the Ministry of Autumn specifies the services performed by certain officials called I-ch'i Shih 伊耆氏, as follows: " The duty of the I-ch'i Shih is to provide, during the great sacrifices, receptacles for the staffs [of those attending]. [He also provides] staffs for those in the army who have received distinction, and he transmits the old-age staffs conferred by the king " (1, XXXVII 9). The word used here for " old-age " is *ch'ih* 齒. In its archaic form the character depicts a mouth showing two, three or four front teeth—a criterion of years comparable to our proverbial test applied to a horse.

Among the notes explaining this passage, there is one by Chêng Chung 鄭衆 of the first century A.D. which says: " In accordance with the king's orders, septuagenarians should receive a staff. At the present day it is called, too, a royal staff (*wang chang* 王杖)." Chêng Hsüan, the more famous commentator of the next century, quotes a passage occurring twice in the *Li chi*, another code of customs and rites. It is as follows: " A man of fifty may use a staff in his home; one of sixty in his local town; one of seventy wherever he goes on ordinary occasions; and one of eighty at Court " (9, XIII 18; XXVIII 5). Again in the *Li chi* it says: " In that [the eighth] month provision is made for the relief of those who are decrepit and aged. To them stools and staffs are given, and rice gruel is distributed for food " (9, XVI 21).

The earliest known mention of the pigeon-staff seems to have been made by Wang Ch'ung, writing in the first century A.D., who probed into all kinds of popular traditions. He says: " On those aged seventy a royal staff is conferred. How did this come about? At the end of the staff is a pigeon, but it is no emblem of rank. What is the use of these staffs? If a pigeon be so lucky, why not give a pigeon itself, instead of a pigeon-staff which does not even indicate rank? " (117, XII 16). This seems to me a more reasonable translation than that given by Forke (32, II 84).

Reading between the lines, one gathers that Wang Ch'ung sought to discredit some generally accepted explanation of the emblem. Was it the tale told in the *Fêng su t'ung* 風俗通, a book treating of customs and compiled about the end of the second century A.D.? Having failed to find the passage

in the only available text, I give it as quoted by Ch'ien Tien in his note on the bird ornament reproduced in Fig. 28, which he wrongly thought had belonged to an ordinary pigeon-staff for the aged (*v. sup.* p. 97). It runs : " While Kao Tsu 高祖 was fighting with Hsiang Yü 項羽 at the capital, he found a hiding place in a thicket. In the course of Hsiang Yü's pursuit, just when the latter came to search the spot, a pigeon cooed above it ; so the pursuers took the presence of the bird as proof that no one was there. Thus [Kao Tsu] was able to escape ; and after he ascended the throne, because of his marvel at this bird, he had [pigeon-]staffs made for presentation to the aged " (25, IV 4). If the tale were true, that pigeon changed the course of history ; for had Hsiang Yü captured his rival, then known as Liu Chi 劉季, surely he would have killed him and founded a dynasty himself. When Liu Chi became the first Han emperor, memory of his escape might well have moved him to honour the pigeon as a sort of totem or badge of his House.

There is a parallel in Manchu legend. About the fourteenth century a youth named Fan Ch'a 范察 is said to have been the only surviving descendant of Aisin Gioro, the reputed first ancestor of the Ch'ing dynasty which later ruled China. Barely escaping death at the time of a rebellion against his family's rule in Manchuria he hid in wild country. A magpie having perched upon his head, the pursuers mistook him for a tree-stump, and passed by (23, I 1). In consequence, it is said, the Manchus revered magpies. The late Sir Reginald Johnston told me, however, that he had discussed the subject with members of the imperial family, and they attached no importance to it. There was, he said, in the Forbidden City a sort of mast or flag-pole, and on certain festival occasions (*e.g.* New Year, fifth day of the fifth moon, and fifteenth day of the eighth moon) a piece of meat or food of some kind was hoisted up to the top of the pole as an offering to " the birds." Sir Reginald never could obtain a clear account of the origin of this custom, nor learn whether or not the " birds " were magpies.

Another and more prosaic explanation is given of these pigeon-staffs. The section of the *Hou Han shu* relating to rites has this passage : " In the eighth (*chung ch'iu* 仲秋) month, throughout all prefectures, a house-to-house inquiry was made concerning the inhabitants. To those who had reached their seventieth year a jade staff (*yü chang* 玉杖) and a meal of rice-gruel were given. For those aged eighty and ninety the ceremony went further.

Each was presented with a jade staff one foot long having a pigeon ornament at the top. The pigeon is a bird which has no difficulty in swallowing : hence [the ornament served to express the wish that] these old men might not choke. In that month the Star of the Aged (Lao jên Hsing 老人星, corresponding to our Canopus) was worshipped at the Temple of the Aged in the southern suburb of the capital " (29, *Li i chih* 禮儀志, B, 4).

Before questioning the curious statement that these old-age staffs were a foot long and made of jade, let us look into the meaning of the pigeon emblem. As we have seen, there are two contradictory accounts : one that it served to commemorate the first Han emperor's escape ; the other that it symbolized the bird's remarkable powers of digestion.

The sole authority for the tale of Liu Chi hiding in the bushes seems to be the afore-mentioned passage in the *Fêng su t'ung*. If so romantic and momentous an incident really had occurred, surely Ssŭ-ma Ch'ien would have mentioned it in his great history written little more than a century afterwards. Twice he narrates at length the struggle for the imperial throne between Liu Chi and Hsiang Yü during the four years that preceded the latter's death in 202 B.C., which was the actual beginning of the Han dynasty, though the date generally given is 206 B.C., the year when Liu Chi received the title Prince of Han 漢王. These two accounts are given in chapters VII and VIII of the *Shih chi*, treating of Hsiang Yü and Han Kao Tsu respectively ; in neither is there hint of the incident. Furthermore, if these pigeon emblems could be proved to have existed before the Han, the explanation crediting Kao Tsu with the institution of the custom falls to the ground. Later on I shall advance a theory that the pigeon-staffs for the aged had pre-Han prototypes.

There is the alternative explanation that these pigeon ornaments were devised to typify extraordinary digestive powers. It is a matter of common observation, not confined to China, that members of the numerous order of pigeons or doves (*Columbæ*) are most voracious. They have ample crops, and keep them filled with all kinds of food when supplies are plentiful, so that they are supposed to be almost omniverous. Moreover, their ability to swallow easily such large and hard objects as acorns is surprising. Indeed, the notion of choosing the pigeon to exemplify the fullest capacity for taking nourishment is justified. Hence the bird is a suitable symbol of restored vitality, serving to convey wishes for extended longevity to the aged.

Its significance does not end there. Watters wrote an article on *Chinese Notions about Pigeons and Doves* in which he mentions various qualities ascribed to these birds (121). Parental solicitude is one; for the wood-pigeon is believed to hatch out seven chicks, and to feed them all with strict impartiality. The habit of regurgitating digested food into the beaks of their chicks does not seem, however, to have attracted the attention of the Chinese, though it has been noticed in our part of the world, giving rise to the term " pigeons' milk." Pigeons are supposed both to practise and to encourage the virtues of filial piety and compassion. They are credited, too, with steadiness and orderly conduct, and the fact that they seem withal to be rather stupid by no means detracts from those admirable qualities which fit them to symbolize a just and considerate official. The tradition is not without reason that the mythical Emperor Shao Hao 少昊, when he called all his ministers by bird names, chose various kinds of pigeons to designate the five whose functions brought them into direct contact with the people (74, V 666, 667). From these notions came the use of the word *chiu* 鳩 meaning to inculcate a state of order and peacefulness. Thus the term *chiu min* 鳩民 is synonymous with *an min* 安民, " to tranquillize the people." If more testimony be needed to justify the custom of presenting pigeon-staffs to mark the responsibilities and dignity of advanced years, there is the fact that, since pigeons are believed to be long-lived, their flesh is supposed to invigorate those who eat it. In short, the pigeon-staff manifests an application of the universal principle that like produces like, and so the custom may be traced to notions concerning sympathetic magic.

Written accounts and actual staff heads that have come to light leave little doubt that a modelled image of the bird was the usual form in which the emblem appeared on pigeon-staffs. Yet a contrary notion has gained currency : Giles in his *Chinese-English Dictionary* (No. 2267) speaks of " a jade staff upon which the figure of a pigeon was engraved " ; and Mayers in his *Chinese Reader's Manual* (No. 272) uses the same words. Perhaps they derived this idea from a thesaurus of phrases and anecdotes which goes under the title of *Po K'ung liu t'ieh* 白孔六帖, because it combines two works, each called *Liu t'ieh*, by the two authors Po Chü-i 白居易 of the T'ang and K'ung Ch'uan 孔傳 of the Sung. As quoted by Ch'ien Tien in his note mentioned above (p. 97), the words are *k'o chang wei chiu hsing* 刻杖爲鳩形, in which the first taken in its ordinary sense is

" engraved," though the meaning may be " staff carved with the figure of a pigeon." A negative generalization is often rash, and I content myself with the remark that an engraved outline of a pigeon is unlikely.

On reading the passage in the *Hou Han shu*, cited above (p. 107), the presence of error is suspected at once. Staffs made of jade and measuring one foot in length are highly improbable on account of costliness and lack of utility. Moreover, the characters in each instance may have been wrongly copied : " jade " (*yü* 玉) is easily confused with " royal " (*wang* 王), and " one " (*i* 一) may have been changed to " nine " (*chiu* 九). Sun I-jang discusses the subject in his commentary on the *Chou li* text previously quoted (102, LXX 60-62). First he turns to a history, entitled *Hsü Han shu* 續漢書, which was written by Ssŭ-ma Piao 司馬彪 about the end of the third century, and later provided material for that section of the *Hou Han shu* containing the said passage. His quotation runs : " In the eighth month, throughout all prefectures, a house-to-house inquiry was made concerning the inhabitants. To those who had reached their seventieth year a jade staff was given. The jade staff was nine feet long, and it had on its top a pigeon as ornament." That settles the length, which without further explanation might seem excessive. The Han foot measured some three inches less than ours, so that these pigeon-staffs were between six and seven feet by our standard. Consequently they would have exceeded a man's stature only by about a foot—no more than was needed to display the emblem fittingly.

The conclusion that " jade " was written in mistake for " royal " is less certain. In the course of Sun I-jang's argument in favour of " royal " he names three famous scholars of the eighteenth century who held the view which he advances when he states that the character for " jade " in the extant passage from the *Hsü Han shu* is a misprint for " royal." Also he remarks that the words of the *Chou li*, " old-age staffs conferred by the king " 王之齒杖, are found so written in the set of classics which the ruler of the Later Shu Kingdom 後蜀國 caused to be engraved on stone in the middle of the tenth century. For this purpose the *Chou li* text had been transcribed by the calligraphist Sun P'êng-ku 孫朋古 in A.D. 951.

On the other hand, Juan Yüan in a note on this passage of the *Chou li* upholds the reading " jade." He points out that the *Hou Han shu* has mention of a " jade " staff being carried by the official called San-lao 三老, who was chosen in every locality among worthy men of fifty years and over

to function as a sort of justice of the peace (29, *Li i chih*, A, 4; and 19, II 363, 532). In short, he asserts that a "jade" staff was so called because the pigeon emblem was made of jade. While arguing that some kind of emblem was usually fitted to the staff, he calls attention to a rare word which, according to the *Shuo wên* (49, IV B, 9), denoted a horn staff head. He surmises that the old-age staffs, conferred by the king, differed from the ordinary kind in having a jade emblem (1, XXXVII, *Chiao k'an chi*, 4). It is a fact that pigeon-staff heads made of jade have come to light, but those of bronze are more numerous; and so perhaps the bronze kind was conferred by local authorities, while jade was reserved as a mark of royal favour. That would explain to some extent the textual discrepancies and the confusion in the minds of commentators who imagined that the "jade" qualified the staff itself, instead of merely the emblem. Moreover, realizing that nine feet was an impossible length for a staff made of jade, someone may have assumed a misprint and in the text of the *Hou Han shu* changed the numeral to "one."

Having got so far, the reader will have observed that, except for the tale about Liu Chi's escape, which has rather the air of being an invention, commentators seem to assume a continuity of custom between the old-age staffs, described in the two ritual canons embodying Chou tradition, and the Han pigeon-staffs. But can we be sure that the passages in the *Chou li* and *Li chi* were not among the Han interpolations? In any case, they do not mention the pigeon emblem. That the latter did actually exist under the Han cannot be doubted in view of archæological and written evidence. As to supposed prototypes of the pigeon emblem, we have before our eyes the bird ornaments for *ko* hafts, exemplified by Nos. 22 and 23. On stylistic grounds they may be assigned to the latter part of the Chou period, and besides, they are known to have belonged to a weapon which became obsolete about the beginning of the Han. Far from there being any incongruity in the linking of hawk with pigeon, these two were held by popular belief to be interchangeable, one being transformed into the other according to the season (*v. sup.* p. 95). In short, my surmise seems warranted that the Han pigeon-staffs started no new and unfamiliar custom.

I would go further and suggest that the *ko* hafts with bird ornaments were among those to which the *Chou li* alludes when it states that the I-ch'i Shih provides "staffs for those in the army who have received distinction." Presumably such staffs must have borne some martial token to distinguish

them from the others, and the commentators turn to the classics for corroboration. They cite a passage in the "modern text" of the *Great Declaration* 今文泰誓: "The Shih Shang-fu held in his left hand a yellow axe 師尙父左杖黃戉, and in his right grasped a white pennon" (*cf.* 74, III 298). Hence the inference that staffs issued to high military officials carried weapons. That may have been so, though this passage is of too doubtful authenticity to prove it.



FIG. 33 Woodcut from the *Hsü k'ao ku t'u* (6, III 19)

The much-corroded piece, which occasions this somewhat lengthy disquisition, is large enough to have topped a staff nine Han feet in length; for the lumen of the socket is one inch in diameter. That is the measurement taken in the line of the bird's beak and tail, and at right-angles to this the diameter is only one-sixteenth of an inch less; so evidently the bronze was made for a round staff. The bird is fashioned with a rough attempt at realism, and, as mentioned already, parallels have come to light among pottery objects made for burial with the Han dead. Comparison with the woodcut of a pigeon-staff head, reproduced in Fig. 33, is interesting because the latter is taken from a work which may date from about the end of the eleventh century, and be the second oldest illustrated catalogue of bronzes extant, though no original copy is known. A truer likeness to one of these pigeons occurs among the drawings of bronzes in the Manchu imperial collection which was catalogued about 1780 (10, XIV 18).

NUMBER TWENTY-FIVE A censer Han Height, 6⅞ inches (17·5 cm.) Plate XXVIII

THIS spherical vessel on three legs doubtless continued the memory of the ritual *tui* 敦 class of which a few Third Phase examples survive to the present day. It is an instance of the well-known fact that the break in ceremonial continuity brought about by the Ch'in revolution did not utterly extinguish ancient bronze-casting traditions. Some of the old shapes were reproduced, though more or less modified, to serve new needs. No. 25 manifests the transformation of an enclosed food-container into an openwork censer—a change so thorough that only the general shape of the vessel recalls the prototype, and even that resemblance is almost masked by the fowl and five chicks added to the hemispherical lid.

Fumigation with aromatics must have been much in vogue under the Han, if its prevalence be measured by the number and variety of the censers which still remain from that period. Doubtless the new fashion was the outcome of communications established with the West in the second century B.C., when incense came with other imports to balance the silk trade.

NUMBER TWENTY-SIX A censer Probably Han Height, 3½ inches (8·9 cm.) Plate XXIX

AMONG the ritual bronzes are some whose grotesque forms offer distant analogies to No. 26; a closer resemblance is hardly to be expected when the function to be served was an innovation. As previously mentioned, the vogue for censers came in with the importation of aromatic substances under the Former Han. Here is a queer, squat quadruped trampling upon a snake. Its head provides a hinged lid, and its open jaws the escape for scented fumes. The design seems to have been one specially invented for

Han censers; its popularity is attested by the numerous examples which remain. One feature it has in common with earlier works is the manifestation of that humorous spirit which enlivens Chinese art and is one of its most engaging characteristics.

Several varieties of this design appear in the catalogues of the former



FIG. 34 Engraved illustration to *Hsi-ch'ing ku chien* (77, XXXVIII 50)

Manchu imperial collection. The one reproduced in Fig. 34 is entered as an "animal censer (*shou lu* 獸鑪) of the Han period." Another, more like No. 26 inasmuch as it is covered with engraved scale-like forms, is assigned to the T'ang period, perhaps capriciously. But the grotesque creature may be a bird with two legs and the supposed scales be feathers, so far as can be judged from a rather unconvincing drawing (5, XVIII 27). The Han period is a likely attribution for No. 26; possibly it was made a little later.

NUMBER TWENTY-SEVEN A mirror with "nipples" Former Han Diameter, 4 inches (10·2 cm.) Plate XXX

MIRRORS with this type of design are plentiful, and they exhibit some diversity in minor details. Their signal feature is the presence of numerous conical spikes. Nine of these spikes project from the cord-boss which thus differs markedly from the usual smooth, hemispherical kind. Twenty more spikes occupy the middle zone which has an internal border of sixteen bevelled scallops and externally a raised, narrow band shaped like a twisted cord. The thickened edge of the mirror repeats on a large scale the scalloped border just mentioned.

Sometimes the Chinese call these conical spikes *mei* 枚, but more often *ju* 乳, meaning "nipple." An explanation of the latter term in the Sung imperial catalogue follows after woodcuts of six mirrors which display such spikes more or less prominently. It says: "Certain sacrificial vessels have nipples. Nipples are means of nourishment (*yang* 養). Since the sound of music is that with which one's ears are nourished, and the flavour of wine is that with which one's frame is nourished, [ritual bells and vessels] are adorned with conical spikes (*mei*). Mirrors also have spikes (*mei*) because they reflect the image of one's person, and so serve to manifest nourishment. A wish for perfect nourishment is among the customary felicitations which people exchange" (118, XXIX 22). This quaintly ingenious passage rationalizes in a uniform manner the 36 spikes or bosses normally present on the ritual hanging bells, the similar projections on certain ritual vessels, and those on mirrors like No. 27. It would be rash to deny that some such symbolic intent as that suggested by the cataloguers prompted this strange device. Someone has surmised that the "nipples" on bells served a practical purpose by controlling adventitious vibrations and so producing a purer note; others have spoken of a tuning function (*v.* 127, II 7). Perhaps all this is mere theorizing, and the real aim was purely decorative.

The so-called "nipples" on the mirrors are so markedly conical in shape that each catches any light there may be and appears as a sparkling point. Perhaps they were intended as substitutes of inset semi-precious stones, glass or enamel. Some mirrors have cupped cavities which may

have been prepared for such additions, and many bronze objects of the period, which still retain inlaid stones or glass, evidence the popularity of this mode of decoration. On the other hand, some examples of this type of mirror have the smaller cones joined by fillets and so grouped that possibly constellations are represented. Perhaps it is in recognition of this that the term *hsing yün* 星雲, "stars and clouds," is used as an alternative for "nipples" (*v.* 108, pl. 43). Another mode of description is to speak of *lien chu* 連珠, "strung pearls" (*v.* 82, XXIV 66). The very diversity of the nomenclature indicates doubt; and surely the symbolic implication alleged in the Sung catalogue should not be taken too seriously.

NUMBER TWENTY-EIGHT A sun-dial and cosmic mirror, inscribed Hsin Diameter, 8¼ inches (21 cm.) Plate XXXI

MAINLY concentric in arrangement, this complex design may be conveniently described by taking each zone in turn, starting from the centre. The square field around the central perforated boss is occupied by two raised quatrefoils of different sizes, so combined that their points are equidistant. Upon the broad frame, which encloses the square field, are conical bosses alternating with the "Twelve Branches" inscribed in relief. Next is a crowded field containing a medley of animal and elfin figures, eight conical bosses, each seated upon a circle with eight cusps, and four groups of so-called T L V forms. While the bosses and also the forms shaped like the letters T L V are disposed with strict symmetry, the lively figures lack any semblance of uniformity except that their heads mainly point towards the centre. An encircling zone contains the inscription which will be treated presently. Of like width, the next zone is filled with the "oblique comb-tooth pattern," and on this abuts the bevelled edge of

the mirror's thickened rim. Then comes a zone of the "outward pointing saw-tooth pattern," and outside all is the design called "drifting clouds," though it may be derived from much stylized animal forms.

In our detailed study of this mirror's meaning, let us start with the inscription, since it informs us as to the date and the maker's intentions. It comprises fifty-seven characters of *li* 隸 script in relief, and it is rhymed verse with seven characters to a line. Such a mode of literary construction is said to have been invented by the Han Emperor Wu about 108 B.C., when he and his courtiers were wont to engage in poetry contests within the Po-liang 柏梁 Pavilion, each in turn contributing a line. Hence the term "Po-liang style." A version of the legend in current script and a translation are as follows:—

新有善銅出丹陽
湅治銀錫清而明
尙方御鏡大毋傷
左龍右虎辟不祥
朱鳥玄武順陰陽
子孫備具居中央
長保二親樂富昌
壽敝金石如侯王
兮

"The Hsin have excellent copper mined at Tan-yang.
Refined and alloyed with silver and tin, it is pure and bright.
This imperial mirror from the Shang-fang is wholly flawless:
Dragon on the left and Tiger on the right ward off ill-luck;
Scarlet Bird and Sombre Warrior accord with *yin* and *yang*.
May descendants in ample line occupy the centre;
May your parents long be preserved; may you enjoy wealth and distinction;
May your longevity outlast metal and stone; and may your lot match that of nobles and kings."

Other mirrors of like design bear inscriptions mentioning the Hsin (or New) dynasty and also the name Wang 王 which is that of the Emperor's family. For instance, there are those which begin: "Master Wang made this mirror. On all sides the barbarians have submitted, and the House of Hsin is much to be congratulated . . . ." (*v.* 82, XXIV 69-72; 84, II 23; 108, 41, pl. 72; 113, No. 11). All such mirrors presumably were cast within the short space of barely fifteen years during which the dynasty lasted, if its start be reckoned from the end of A.D. 8 when Wang Mang 王莽 proclaimed himself the Hsin Emperor (90, XCIX B, 8). Sometimes it is counted from the beginning of the regency in A.D. 6. His reign is remarkable for a number of socialist schemes; but now our chief concern is with his faith in astrology and magic which doubtless encouraged the vogue for mirrors like No. 28. The narrative of his strange career is full of alleged portents, evidently contrived by his supporters in order to justify the usurpation. Perhaps some prompting came from Mang himself, yet he seems to have been credulous enough to believe in them.

In the biography of the Grand Empress Dowager, widow of the eighth Han emperor and aunt of Wang Mang, there is a passage about the usurper's attempt to gain possession of the Han imperial seal, and to impose on the Empress a fresh title linking her with the Hsin dynasty. At the right moment someone conveniently found a magical bronze tablet (*fu ming t'ung pi* 符命銅璧) inscribed with an order for conferment of the title. Mang and his ministers agreed to take this as a message from heaven; the reluctant Empress had to submit to a ceremony at which a seal engraved with the title was presented to her. The man who claimed to have found the tablet was ennobled (90, XCVIII 11).

Wang Mang had married his daughter to the young Emperor P'ing 平, and when in A.D. 5 she reached the age of fourteen, Mang thought the time had come to ensure her an heir. So he built a costly road in order to harmonize male and female principles. Running north and south, it was called the Tzŭ-wu Road 子午道, for reasons which will be apparent presently (*v.* Fig. 36); but its influence on child-bearing is not explainable so simply (*v.* 90, XCIX A, 18). Another instance of this attitude was his attempt in A.D. 22 to counter the popular movement in favour of the Liu 劉 family whom he had supplanted. He caused to be destroyed the wooden screens at the entrances of two of the Han royal tombs. Such screens were named

fou ssŭ 罘 思, and the term for "recalling to mind" was *fu ssŭ* 復 思; so on the principle of sympathetic magic he thought that remembrance of these departed emperors and their dynasty could be made to perish with the screens (*v.* 90, XCIX B, 19).

Persons eager to ingratiate themselves with Wang Mang alleged strange happenings which they represented as portents sanctioning the new dynasty. Apparitions were seen of a yellow dragon and of a mysterious being clad in white, and a hen was reputed to have been transformed into a cock. Finally, a pretended discovery in the temple dedicated to the founder of the Han dynasty was needed to overcome Mang's simulated reluctance to assume the imperial status. It was a bronze box containing documents to the effect that Kao Tsu's shade had received orders from heaven to hand over the realm to the House of Hsin. So at the end of A.D. 8 Wang Mang accepted the celestial mandate, and "the whole world started afresh" (*v.* 90, XCIX B, 7, 8).

It is difficult to decide how far he credited these bogus manifestations. Certainly during his last hours, nearly fifteen years later (A.D. 23), he expected divine deliverance, trusting to the magic potency of a contrivance called *shih* 栻. His palace in flames, the rebels closing in on all sides, he calmly sat in an island pavilion watching the "handle" of the Dipper constellation represented on a disk of the instrument. The disk seems to have been made to revolve so that the "handle" was kept in alignment with the shadow cast by a gnomon, and Wang Mang continued to shift his position accordingly, imagining that thus he remained under the Dipper's protection (*v. inf.* p. 128). He is reported to have said: "Heaven produced the power that is in me. The Han soldiers—what can they do to me?" Thus he used the words (with but a slight change suited to the occasion) uttered by Confucius when his life was threatened by brigands (*v.* 74, I 202). Soon the rebels fought their way into the pavilion, cut off the usurper's head and dismembered his body in order to claim rewards for the trophies (90, XCIX C, 21).

The Shang-fang was a department started under the Ch'in dynasty as an activity of the board called Shao-fu 少 府 which was charged with the duty of supervising the private funds of the imperial house. It lasted many centuries. All kinds of utensils and especially objects of art and luxury, intended chiefly for the palace, were made in its workshops, among them

magic charms, and that explains why the name is found so often inscribed on mirrors. The words "imperial mirror from the Shang-fang" do not necessarily mean that it was actually one of those made at the Shang-fang for imperial use, but that in quality and design it resembled such mirrors.

The terms of the inscription leave no doubt as to the purpose of this mirror, apart from its ordinary function. It was a talisman to bring the owner all sorts of boons: protection from harm for himself and parents, progeny, wealth, honour and long life. Its powers were to extend even beyond this world, because the wish for descendants implies a never-failing succession able to maintain due performance of the ancestral rites. The hope was that they should, moreover, "occupy the centre," *i.e.* hold important posts, according to Karlgren's interpretation (58, 31). Thus fortunate, they might handsomely observe filial obligations to solace the first owner, their ancestor. Doubtless that was one reason why mirrors such as this were buried with the dead.

What are the means by which the mirror served to ensure these boons? The answer is found in the symbols which typify cosmic forces. These symbols represent the firmament and its supposed terrestrial counterpart, the heavenly bodies and the seasons which manifest the workings of nature—in brief, the entire universe. On the principle that like produces like, the mirror is thus endowed with miraculous powers, partaking of and transmitting vitalizing influences from the mainsprings of life. When placed in the coffin, it is able to bring vigour and comfort to the occupant, so that he be inclined to bestow benefits upon his descendants. Besides its cosmic potency, it is able, in common with all mirrors, to light the dead. These are reasons why so many are found in tombs.

Besides serving to secure the cord, the mirror's boss signifies both the dome of heaven's vault around the celestial pole and also a corresponding central region on earth. Astronomical notions current in China about the beginning of our era, when this mirror was cast, may be learnt from chapter XXVII of the *Shih chi* (*v.* 19, III 339-412). It begins with a description of the Five Palaces (Wu Kung 五 宮)—Central, Eastern, Southern, Western and Northern—into which the sky is conveniently divided. The Central Palace includes the polar constellation and the neighbouring stars, which appear to revolve round the celestial pole once in a sidereal day.

For a fuller account of the polar constellation we must turn to the more technical writings of Han astronomers who call it the Purple Palace (Tzŭ Kung 紫 宮), assigning to it five stars, named as follows (*v.* 89, 329):—

1. Heir Apparent (T'ai-tzŭ 太 子), identified as γ Ursæ Minoris.
2. Sovereign Star (Chu Hsing 主 星), called also Great Star in the middle of the North Pole Constellation (Pei-chi chung-yang Ta Hsing 北 極 中 央 大 星) or simply Great Star (Ta Hsing 大 星), identified as β Ursæ Minoris.
3. Concubine's Son (Shu-tzŭ 庶 子), identified as *a* 3233 Ursæ Minoris.
4. Empress (Fei-hou 妃 后), identified as *b* 3162 Ursæ Minoris.
5. Pivot of the Sky (T'ien-shu 天 樞), identified as *b* 4339 Camelopardalis.

Ssŭ-ma Ch'ien in the *Shih chi* is not so specific, but uses the term Purple Palace loosely to include several constellations. Indeed, he mentions by name only three of the five stars, Nos. 3, 4 and 5, which he calls collectively the Three Dukes (San Kung 三 公) or The Sons (Tzŭ-shu 子 屬). He refers to No. 2 in the sentence which opens his astronomical chapter: "The Central Palace comprises the polar stars (*t'ien chi hsing* 天 極 星). Its most brilliant star is the usual abode of T'ai-i 太 一."

We need not dwell on the allusion to T'ai-i, a cult which appears to have come into existence in 113 B.C. or a year later (19, III 485, 493). Often mentioned in chapter XXVIII of the *Shih chi*, it probably was related to the ancient worship of Shang Ti 上 帝. The star in question, identified as β Ursæ Minoris, may have been deemed the abode of the supreme deity not only because of its brilliance, but also because it was recognized as the Pole Star. On the other hand, Maspero argues that probably the Pole Star of the Han period was the fifth and smallest among the group in the Purple Palace tabulated above (*v.* 89, 324-333). The name Pivot of the Sky or simply Pivot (Niu 紐) seems to support that conjecture.

Identification of the Pole Star is a problem which had aroused much discussion, notably by J. B. Biot, Gaubil and Schlegel, before L. de Saussure concluded that Chinese astronomers, starting about the twenty-sixth century B.C., recognized a succession of Pole Stars (91, 495-525). This theory accords with the fact that the celestial pole is not a fixed point. Like the axis of a spinning top, the earth's axis describes a cone. Though a complete revolution occupies the immense span of nearly 26,000 years,

the pole does during a tenth of that time travel over an appreciable arc of the whole circle. Looking back twenty-six centuries before our era we find that a brilliant star, α Draconis, lay close to the pole's path; yet it seems never to have figured as a Pole Star in Chinese tradition. Thereafter the path approached other stars of much less magnitude. That they may have been regarded as Pole Stars is a mere theory based on their identification with certain Chinese star-names which denote Shang Ti or his earthly counterpart, the "Son of Heaven." In other words, the supposition is that such insignificant stars would not have been so named unless Chinese astronomers had observed their nearness to the pole's path and therefore picked them out as Pole Stars. During the last millennium B.C. the pole moved in the region of the Small Bear, and at the beginning of our era reached a point slightly nearer to β than to α Ursæ Minoris. About the third century its position became equidistant between these two stars, and after that it approached α. It is still approaching α, the actual Pole Star.

Like other arguments which claim remote antiquity for Chinese astronomy, this retrospect involving a long succession of exact observations is an unconvincing theory. Even had the ecliptic been known in China about the third century B.C., the fact was still unrecognized that the pole of the earth's axis revolves round the pole of the ecliptic. The names, claimed by the above-mentioned writers to have had astronomical significance, seem really to have been chosen for astrological reasons.

At all events, the Pole Star of the Han period appears to have been regarded as fixed. It was the abode of the supreme deity, the centre around which the heavenly bodies revolved, and just like it the capital of China, which held the emperor, was the centre of the world, the core of civilization. A saying attributed to Confucius expressed the common view: "He who exercises government by means of his virtue may be compared to the Pole Star (Pei Ch'ên 北 辰) which keeps its place, and all the stars turn in homage towards it" (*v.* 74, I 145). Therefore the "Son of Heaven," holder of the celestial mandate, when giving audience turned to the south; and so the expressions "facing south" (*nan mien* 南 面) and "facing north" (*pei mien* 北 面) signify ruler and subject, respectively. Among the people the same notions prevailed; the central part of a homestead was reserved for the head of the family, and there, facing south, he received the others on ceremonial occasions.

Enough has now been said to explain the wish expressed in the mirror's inscription that descendants may "occupy the centre." But there still remains a point which calls for further comment. The title "Son of Heaven" first reserved for the King of Chou, suzerain lord of all the ruling princes, and afterwards borne by successive emperors of China, is not merely a euphemistic parallel to Shang Ti, the title of the supreme deity on high. Its real import depends on the meaning of *t'ien* 天, the term for "heaven." The archaic form of the character for *t'ien* depicts the frontal view of an erect human figure, and it is to be differentiated from the mode of writing *ta* 大, "great," only by some slight modification to the top or head of the figure. Heaven, then, was deemed the abode of the "great" who, delivered from earthly trammels, had been translated to the stars there to dwell among their august compeers. This idea of sidereal immortality the Chinese shared with our ancient world. It gave a rational, animistic foundation for astrology. The life which warms the mortal frame is of the same essence as the fires of heaven. From the stars the soul derives its qualities at birth and its destiny here below. The "Son of Heaven," descendant of ancestors on high, looked up to them for counsel and authority.

Evidence of such beliefs appears in an inscription on the *Ch'in Kung Kuei* 秦公簋 in which a ruler of Ch'in apostrophizes his twelve forerunners, then "on the hill of deified ancestors" 在帝之坏 — Olympian heights among the stars; and he expresses a wish "long to serve as the representative of those who are in heaven" 畯疐在天, meaning these same predecessors (*v.* 66, 288). Examples might be multiplied from classical literature and the inscriptions on bronzes. They give added significance to the names of the polar stars on p. 121.

The next zone of the design to be considered has the two quatrefoils so combined that their eight points are equidistant. They may be taken to manifest an alternative to the conception which divides the sky into quadrants, as cited above from the *Shih chi*. In the nine-fold method the octants accord with the Eight Trigrams (*pa kua* 八卦) and other correspondences (*v. inf.* p. 133), just as the other method provides a basis for the quinary system of cosmology which includes the theory of the Five Elements (*wu hsing* 五行). An account of the Nine Regions (*chiu yeh* 九野) appears first in the third century B.C. (88, XIII 1), but probably it reflects older notions. The Nine are as follows :—

Central Heaven : The Balancer, *chün* 鈞 (regulating the four quadrants of the sky).
Eastern Heaven : the Green, *ts'ang* 蒼 (following the colour corresponding to Wood, the Element of the eastern quadrant).
North-eastern Heaven : the Transformer, *pien* 變 (here the influence changes from that of *yin* to that of *yang*).
Northern Heaven : the Sombre, *hsüan* 玄 (following the colour corresponding to Water, the Element of the northern quadrant).
North-western Heaven : the Hidden, *yu* 幽 (here the influence of *yin* begins).
Western Heaven : the Gleaming, *hao* 顥 (following the colour corresponding to Metal, the Element of the western quadrant).
South-western Heaven : the Scarlet, *chu* 朱 (here the influence of *yang* lessens, while still in the quadrant of Fire).
Southern Heaven : the Flaming, *yen* 炎 (here Fire the Element of the quadrant is maximum).
South-eastern Heaven : the *Yang* 陽 (here the maximum influence of *yang* begins).

Some explanation of the terms *yin* and *yang* is needed, because they are encountered in the passage just cited, and more especially because they occur in the inscription on this mirror. First let us turn for information to the structure of the characters used to write them. Both have as determinative *fou* 阜, meaning a mound. According to the *Shuo wên*, the remaining part of each character serves a phonetic function (49, XIV B, 1). In the same work these so-called phonetic parts are entered as independent characters, though the first is modified by an addition. It appears in the form 霒, which is described as composed with *yün* 雲 (cloud) and *chin* 今 as phonetic. The meaning given is "cloud obscuring the sun" (49, XI B, 4). *Yang* 昜, according to the *Shuo wên*, combines the three elements *jih* 日 (sun), *i* 一 and *wu* 勿 (banner). In making no further comment, the author implies that structurally the character is an example of the "associated ideas" class; but what he had in mind is not obvious. Hsü Ch'ieh 徐鍇, a Sung commentator on the *Shuo wên*, attempts an explanation by saying : "The sun is that which is opened and is bright. *Wu* 勿 is a banner which when caught by the wind is opened ; *i* 一 is that which opens." The solution proposed by Kuei Fu 桂馥, writing in the latter part of the eighteenth century, seems to me more satisfying. He thinks that *yang* should be

regarded as composed with *tan* 旦, dawn, and *wu*, banner (*v.* 106, 4220). These explanations aim at accounting for the first of the *Shuo wên* definitions, that the word *yang* means "to open" (*k'ai* 開). The other three are : "to soar" (*fei yang* 飛揚) ; "to grow" (*chang* 長) ; "suggestive of classes characterized by strength" (*ch'iang chê chung mao* 彊者衆皃). In short, this plurality indicates the diverse implications conveyed by the term (*v.* 49, IX B, 5). A reasonable conclusion as to the character's structure is that it combines two pictograms : the rising sun and a banner with streamers. The rays at dawn, shooting upward, are likened to streamers, taut in the wind ; and thus the day is opened.

Probably the two characters 霒 and 昜 went out of currency in the latter part of the Han period, and were replaced by the forms 陰 and 陽 which had the "mound" determinative added, and conveyed two simple and opposite meanings. *Yin* was "dim" or "secluded" (*an* 闇), and was a term applied to the south of a river and the north of a hill ; *yang* was "prominent and bright" (*kao ming* 高明). Thus the words are defined in the *Shuo wên* (49, XIV B, 1), the contrast being between shadow and sunshine, as exemplified in a valley through which a river runs ; and it should be added that the general trend of rivers in China is east and west. The converse to *yin* is obvious, though not expressly stated in the *Shuo wên* : *yang* is a term applied to the sunny north bank of a river and the sunny south side of a hill. *Yang* is so defined in a text probably dating from the third century B.C., the *Ku-liang Commentary* to the *Ch'un ch'iu* (61, IX 12). In earlier classical literature the terms occur with the same connotation : for instance, in the *Kung Liu* 公劉 song of the *Shih ching* (74, IV 488).

The truth seems to be that the conception of *yin* and *yang* in a philosophical sense started about the fourth century B.C. Waley brings evidence to support this conclusion and points to the *Hsi tz'u* 繫辭, which is generally appended to the *I ching*, as one of the earliest texts to mention the dualistic theory (115, 110-112). Alternating activity and passivity of these opposite and complementary forces result in the never-ending cycle of all life. That is the explanation, as given in the commentary, to the following definition in the *Hsi tz'u* : "Vitalization and revitalization is termed *i* 生生之謂易", perhaps intended to throw light on the title *I ching*, the *Book of Changes*. A later passage in the same appendix evidently has to do with the stalks method of divination. It says : "To take cognizance of all the numbers in

order to look into the future is termed 'to divine' (*chan* 占). To understand the changes [while thus divining] is termed *shih* 事, [that which has to be done]. The incomprehensible in manifestations of *yin* and *yang* is due to the spirits (*shên* 神)" (17, VII 13).

Among allusions to divination in the *Chou li* is the following : "The duties of the dream-diviner are concerned with the year and seasons, with observing the union of heaven and earth, and with distinguishing between the life-breaths of *yin* and *yang*. Through indications given by the sun, moon and stars, he divines lucky and unlucky omens in the six kinds of dreams" (1, XXV 1).

The inference, then, to be drawn from such passages is that an early use of the two terms was to signify certain contrasting omens. Having this specialized meaning, as well as the ordinary one of "shade" and "light," obviously they were a suitable pair for naming the two antithetic principles when the dualistic theory came to be formulated. Allusions to the theory will occur later in these pages, and here, except for a brief and blunt summary, I refrain from further discussion of a subject liable to infinite elaboration. *Yin* is female, weak, dark, cold, moist, turbid, heavy, prone to hide, contract and sink ; *yang* is male, strong, bright, hot, dry, clear, light, prone to expand and rise.

Next we come to the square frame, a symbol of the earth. It is inscribed with the duodenary signs : *tzŭ, ch'ou, yin, mao, ch'ên, ssŭ, wu, wei, shên, yu, hsü* and *hai*. The corresponding characters in current script are given in Figs. 35 and 36. Here they are shaped in a decoratively fanciful way to harmonize with the rest of the design. Observe the difference, for example, between the first member of the set, in the centre at the top, and the normal *li* script form of the same character in the inscription. Observe also the sixth sign, since it demonstrates the fact that a serpentine variant was in ordinary use about the beginning of our era (*v. sup.* pp. 20, 21). Here it looks even more like a snake than the *Shuo wên* example copied in Fig. 4 *e*. Though problems concerning the structure of these two signs, *tzŭ* and *ssŭ*, have been discussed above at some length, the theme is by no means exhausted, and the perplexities revealed then may be taken as an index of the obscurity which surrounds the rest of the group. In the *Shuo wên* the explanations of their structure are among the least convincing in that work. Perhaps their origins are some of the oldest in Chinese script ; Kuo Mo-jo

thinks that they are traceable to Chaldean astronomy (67, 44-65). At all events, the need to name the twelve months no doubt occasioned them; like the counting of days on the fingers of both hands, it was a device of primitive folk.

A well-known, but late, name for the duodenary set is the "Twelve Branches," the signs being regarded as complementary to the "Ten Stems." Not far different is the term "offspring" (*tzŭ* 子), while members of the denary set are called "mothers" (*mu* 母) for obvious reasons (19, III 318; 78, III 37). Considered in relation to the sky, they are known as the Twelve *Ch'ên* 十二辰. Perhaps the best general rendering of *ch'ên* is "starry determinant"; but that calls for explanation.

Ch'ên is a term so diversely applied that one can well understand the query of a puzzled Marquis of Chin recorded in the *Tso chuan* for the seventh year of Duke Chao (535 B.C.). The Marquis said: "'So many talk to me about *ch'ên*, but their accounts differ. What is it you call *ch'ên*?' The reply was: 'The conjunction points for sun and moon are called *ch'ên*, since there the sun is mated'" (109, XLIV 18). Kuo Mo-jo concludes that this passage is an interpolation, partly because it occurs twice in the *Han shu* with textual differences, and in one of these places the *Tso chuan* is not mentioned as the source (67, 41, 42). Even so, the value of the passage for our present purpose is not lessened; for we are concerned chiefly with notions current when No. 28 was cast. An eclipse of the sun and questions about its significance as a portent gave rise to the dialogue with the Marquis, and this definition was calculated to meet the case.

In a wider sense *ch'ên* is used for any starry position or any asterism observed as a point of reference. Take, for instance, an entry in the *Ch'un ch'iu* for 525 B.C. (*v.* 74, V 665-668). It says: "In winter there was a comet in the (*or* a) great *ch'ên*." Legge, following general opinion, takes this to mean the asterism Ta Huo 大火, which is equated with Hsin 心 (Heart of the Green Dragon), and corresponds to α, σ and τ Scorpionis. The most noticeable of the three is, of course, α, the brilliant star of reddish colour which we call Antares or "Scorpion's Heart." The latter name, by the way, offers a striking parallel to the Chinese "Dragon's Heart." That the meridian transit of Antares just after sunset marks the middle of summer was an observation which probably goes back to a remote age. Mention of it in the first section of the *Shu ching* (74, III 20) may not be positive proof of

great antiquity, because the date of the text is questionable; yet a long tradition is doubtless behind it. The seasonal significance of this culmination was of peculiar moment to an agricultural people, and therefore the Chinese with reason may have regarded the star as the "great *ch'ên*" *par excellence*. In the *Tso chuan* relating to the comet of 525 B.C., the "great *ch'ên*" is taken to be Ta Huo; but in the *Kung-yang chuan* other asterisms are identified with the term as well. It says: "Ta Huo is a great *ch'ên*; Fa 伐 ['Orion's Sword'] is a great *ch'ên*; and Pei Ch'ên 北辰 is also a great *ch'ên*" (63, XXIII 9). According to the *Êrh ya* (3, VI 11), the name Pei Ch'ên is synonymous with Pei Chi 北極, which strictly speaking is a name for the North Polar group of five stars (*v. sup.* p. 121), but sometimes is used for Polaris.

We have already noticed a varied lot to which the term *ch'ên* is applied: lunisolar conjunctions, Antares, certain stars of Orion and the North Polar asterism. To these may be added the sun itself, when the gnomon came into use and enabled the solar altitude to be measured at the meridian. Another *ch'ên* is the Great Bear which I prefer to call the Dipper in order to get near the Chinese name of Pei Tou 北斗, also likening the group's configuration to the shape of a vessel with handle, a more reasonable comparison than either "bear" or "wain." Thus it is described in the *Shih chi*: "The Dipper is the imperial carriage; it revolves in the centre; it governs the four cardinal points; it separates *yin* and *yang*; it determines the four seasons; it adjusts the Five Elements; it causes to evolve the divisions [of time] and the degrees [of the sky]; it settles the various calculations" (*v.* 19, III 342). As an indicator of the seasons, through the positions of the "handle" just after sunset, the Dipper has been observed from primitive times all over the northern hemisphere. It is pre-eminently a *ch'ên*, a starry determinant. A passage in *Huai-nan Tzŭ* explains how in the course of its annual revolution the part of the sky to which its "handle" points is always one of the Twelve *Ch'ên*. "Each month the Dipper revolves through one *ch'ên*, until finally it returns to its starting place. In the first month [its handle] points to *yin* 寅; in the eleventh month [its handle] points to *tzŭ* 子. In one year it makes a complete revolution; it comes to the end and starts again" (78, III 25).

As to the structure of the character 辰, that is another matter. Apart from its use to write the term just discussed, it is the fifth of the duodenary

set and probably one of the earliest signs in Chinese writing. Kuo Mo-jo divides the forms of the character that occur in the Oracular Sentences into two types, one depicting the shell of a bivalve, the other an angular sonorous stone. He supposes that they represent primitive farming implements of shell and stone, respectively; and, as to the stellar connotations of *ch'ên*, he remarks primitive habits of looking to the sky for guidance in regulating husbandry (67, 25, 26). Astronomical links, such as those discussed above, lead Hopkins to see in the character "an amplified diagram of the two groups of stars known to the Chinese as the Heart and Tail of the Dragon, and to us as Antares and the Tail of the Scorpion" (46, 97). Hsü Shên is evidently groping in the dark when he treats the problem (49, XIV B, 7), and so I do not quote him. A final solution is not likely to be forthcoming.

To account fully for all that is signified by these twelve characters on the mirror would entail whole treatises on Chinese astronomy, astrology and cosmology. In order to keep within bounds, I give a diagram (Fig. 35) and a table (Fig. 36) which between them point to most of the manifold implications. There I must leave the matter, after adding a few brief notes of explanation, and reserve for detailed discussion the notions actually represented in the figured zone of No. 28.

A diagram such as Fig. 35 is found essential for correlating the various components of the balanced scheme whereby the Chinese reduce to uniformity of notation, as regards both time and space, all revolution whether celestial or terrestrial. For the present purpose this diagram offers the particular advantage of corresponding exactly to the mirror as viewed on Plate XXXI.

The twelve signs around the diagram's centre have already been explained to some extent, and more of their implications will be noted presently. As a means of indicating twelve equatorial sectors of the sky, they are paralleled in the next circle by a second duodenary set, the Twelve *T'zŭ* or "Halts" 十二次. In the order shown in Fig. 35, their names are:—

1. Shou Hsing	7. Chiang Lou
2. Ta Huo	8. Ta Liang
3. Hsi Mu	9. Shih Ch'ên
4. Hsing Chi	10. Shun Shou
5. Yüan (originally Hsüan 玄) Hsiao	11. Shun Hsin (or Huo 火)
6. Chü Tzŭ	12. Shun Wei

This method of division is based on the observation that Jupiter takes approximately 12 years to pass through the circuit of the heavens, each year

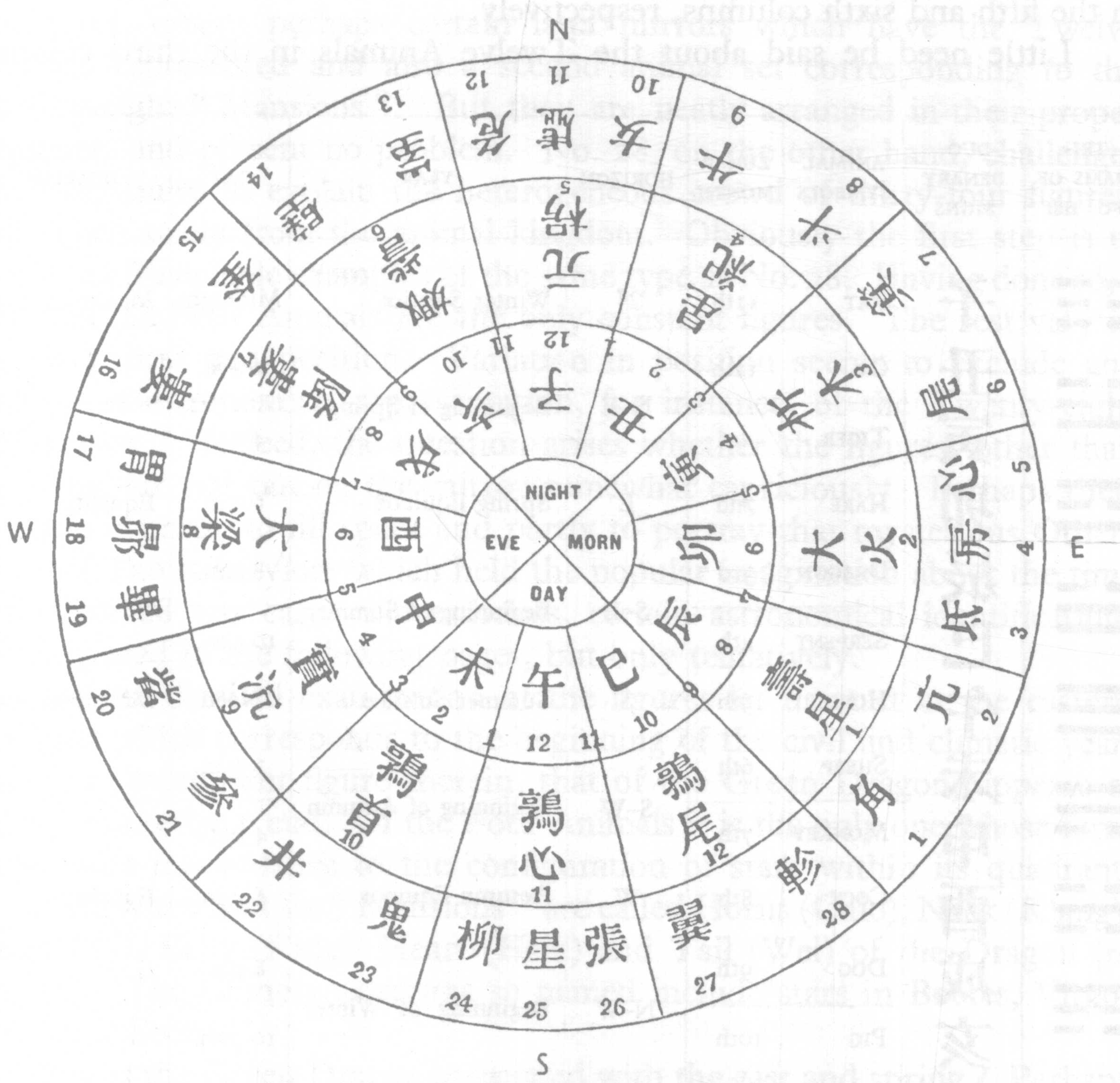


FIG. 35 Diagram to correlate the following (named in turn starting from the centre): the day, duodenary signs, twenty-four (Chinese) half-hours, twelve Jovian sectors of the equator, twenty-eight "Mansions" and four cardinal points Modified from a diagram in 93, 39, which is based on a woodcut in the seventeenth-century classical encyclopædia, entitled *Wu ching lei pien*

advancing about a twelfth of the round, and each year rising and setting one month later. Year Star (Sui Hsing 歲星) was therefore the name given to the planet. The Chinese saw in this an analogy to the moon, and it suited

their scheme of reducing everything to uniformity, the year being compared to a month of the Jovian cycle. But Jupiter, like the sun, moon and other planets, appears to move anti-clockwise through the stars, in a direction opposite to that in which the Twelve *Ch'ên* are disposed. In order, therefore, to name the year in terms of the Jovian cycle while conforming to calendrical notation, a shadow of the planet, the Sui-yin 歲陰 (called also T'ai-sui 太歲), was imagined to move clockwise in step with Jupiter. Thus, when Jupiter is in *ch'ou* 丑, the shadow is in *yin* 寅; when Jupiter is in *tzŭ* 子, the shadow is in *mao* 卯, and so on (19, III 357-362). Accordingly another set of twelve names was needed to denote the positions of these "shadow" years. Chavannes gives a table of the correspondences (19, III 654). There is a chapter of the *Lun hêng* in which is discussed the curious conception of T'ai-sui as a malevolent spirit (32, II 402-409).

The practical importance of the Jovian cycle is that it was used for naming the years. It occurs thus in the *Tso chuan* and *Kuo yü*; but, as Eberhard shows, these notations probably were interpolated about the beginning of our era. Political propaganda concerning Wang Mang's ancestry may have prompted this tampering with the texts (28, II 22-40). Since Jupiter actually takes only 11·86 years to make the circuit and get back to the same position relative to the earth and the sun, there is an error of one year every eighty-three years. This necessitated adjustments, and so for greater convenience a cycle of sixty tropical years was substituted probably in Wang Mang's time, and named by the *chia tzŭ* 甲子 method ("Stems" and "Branches" coupled in parallel sequence), which had been in use from remote antiquity for naming the days (*v.* 18). For many centuries, however, memory of the Jovian cycle persisted, as manifested in the formula *T'ai-sui tsai* 太歲在 preceding the *chia tzŭ* notation for the year.

Around the periphery of certain later mirrors there are names which tally with those in the outermost zone of Fig. 35 and sometimes the actual constellations are represented pictorially. On this mirror their presence may be taken as implied, since the Twenty-eight "Mansions" (*hsü* 宿, *shê* 舍 or *wei* 位) were generally recognized at the time when it was cast. Writing in the same century, Wang Ch'ung remarks that "some mathematicians reckon the entire circumference of heaven at 365 degrees," and that "the sun proceeds one degree every day." "Besides we have," he says, "the 'twenty-eight constellations,' which serve as resting-places to sun and moon, just

as on earth the couriers lodge in postal stations" (32, I 257; II 174). Here, then, is explained the idea that prompted the term "mansion" as applied to these subdivisions of the quadrants of the celestial sphere, seven to each quadrant. Choice of the number twenty-eight was doubtless based on the fact that the moon takes approximately twenty-eight days (more exactly twenty-seven days and a third) to revolve in its orbit; in other words, that is the time in which the moon returns to the same position with reference to the fixed stars. This subdivision into twenty-eight sectors, conceived as a sort of analogy to a sidereal month, provides a more accurate means of locating any position in the sky between the circumpolar region and the equator. Each sector is named after a constellation which lies wholly or partly within it, and hence, instead of "mansions," the sectors are sometimes called *hsing* 星, a term applied to a group of stars as well as to a single one. A list of these constellations, together with identifications in Western astronomical terms, may be found in books of reference: for instance, in Giles' *Chinese-English Dictionary*, and therefore it is not repeated here. Since the sectors are delimited by certain chosen stars, they are of unequal width. Several writers give the extent of each arc on the celestial equator as stated in Chinese texts (*e.g.* 28, II 18, 19; 89, 282, 283). In Fig. 35 the "Mansions" are numbered in an anti-clockwise direction because the sun and moon move that way in relation to the fixed stars. They may also be taken calendrically, being counted clockwise starting from the winter solstice.

Finally, the positions of the cardinal points are marked in the diagram, and this is a subject that is treated later.

Fig. 36 provides a useful epitome of other correspondences which the design on No. 28 implies. Indeed, on some mirrors there are representations of the Eight Trigrams and the Twelve Animals included here in the first and third columns, respectively.

As to the Trigrams, it must suffice to remark their function to interpret portents as indicated by a passage in the *Chou li*. "The diviners are charged with the duty of divining with the tortoise. By means of the eight omens resulting from divination with the stalks, they check the eight omens [derived by scorching the tortoise-shell]. By means of the Eight Trigrams they interpret the eight manifestations derived from divination with the stalks. In such manner they recognize [whether the omens are] lucky or

unlucky" (1, XXIV 21). Observe in Fig. 36 the fancied association between the Trigrams and the eight-fold divisions of space and of the year expressed in the fifth and sixth columns, respectively.

Little need be said about the Twelve Animals in the third column,

TRIGRAMS OF FU HSI	DUODENARY SIGNS	ANIMAL SYMBOLS	LUNAR MONTH	HORIZON	YEAR	DAY	DUALISM
☷	子	RAT	11th	N	Winter Solstice	Midnight	Maximum *yin*
	丑	OX	12th			2 a.m.	
☳				N–E	Beginning of Spring		
	寅	TIGER	1st			4 a.m.	
☲	卯	HARE	2nd	E	Spring Equinox	6 a.m.	Equality
	辰	DRAGON	3rd			8 a.m.	
☱				S–E	Beginning of Summer		
	巳	SERPENT	4th			10 a.m.	
☰	午	HORSE	5th	S	Summer Solstice	Noon	Maximum *yang*
	未	SHEEP	6th			2 p.m.	
☴				S–W	Beginning of Autumn		
	申	MONKEY	7th			4 p.m.	
☵	酉	COCK	8th	W	Autumn Equinox	6 p.m.	Equality
	戌	DOG	9th			8 p.m.	
☶				N–W	Beginning of Winter		
	亥	PIG	10th			10 p.m.	

FIG. 36 Table of correspondences, based on one drawn up by L. de Saussure

because they are not represented on No. 28 except by implication through analogy with the Twelve *Ch'ên*. Whatever its origin, the conception of the group existed in China at the time when this mirror was cast, though it does not appear as a motif in mirror design until later. Allusions made by Wang Ch'ung to the Twelve are quoted below (p. 147).

The remaining columns of Fig. 36 hardly call for explanation in view of what has been said in the foregoing pages. A point to note is that the Chinese take the solstices and equinoxes to mark the middles of the seasons, not the beginnings as we do. Another difference is that the Chinese count twelve hours to our twenty-four. This may have begun after the second century B.C.; for there is mention of 15 divisions in *Huai-nan Tzŭ* (78, III 24, 25). Some have assumed that the months and hours were denoted by the "Branches" much earlier than the last century or two B.C., which probably was the actual date. The Twelve Animals conception may have been adopted about the same time.

We have seen that the Central Palace of the sky is paralleled in the Court of the "Son of Heaven," so also the rest of the celestial hemisphere has its counterpart below in the country surrounding the capital. Lists of these correspondences are so conflicting that no single one can be taken as definitive enough for inclusion in either Fig. 35 or 36. Some give the terrestrial regions in terms of the Thirteen Provinces, instituted by the Han Emperor Wu, which do afford specific data. But others name principalities, and, since these changed with the times, the lists vary accordingly. A further complication is lack of uniformity in the method of drawing these comparisons; evidently geographical orientation was not made the sole basis (*v.* 19, III 384, 404-412; 90, XXVI 8, 9).

Wang Ch'ung remarks: "The destiny of the State is connected with the stars. Just as their constellations [*hsü* 宿] are propitious or unpropitious, the State is happy or unhappy. As the stars revolve and wander, men rise and fall" (32, I 137). Eclipses, phases of the moon, positions and conjunctions of the planets, comets and falls of aerolites, all have mysterious relations with humanity. Exactly similar notions prevailed in the ancient Mediterranean world, and the various regions of the sky were held to have terrestrial analogues. Like the Chinese, we inherit traditions traceable far back to origins in primitive animism, to a mode of thought which tried to explain rationally every phenomenon by attributing life and personality to all the forces of nature. Thus the stars came by their queer names. Images of persons, animals and objects were fancied in the sky when linked with some mythological episode or some historical event. The choice of certain designations may seem to us capricious and purposeless, but probably that is because the clues to their sense and reason have long been forgotten. It is a

fact, however, that with few exceptions the most ingenious modern imagination fails to recognize the semblance to earthly forms assigned to the asterisms in Chinese uranography and in ours. The Chinese and we differ entirely concerning stellar nomenclature, except on a few minor points, in spite of our common debt to the Chaldeans, the creators of astronomy and chronology. During the first millennium B.C. the Chaldeans slowly and laboriously built up these sciences, and the Greeks gained the rudiments of their knowledge from them, though from about the fifth century they were enabled with the aid of trigonometry to advance independently. The Chinese, too, borrowed from Mesopotamia either directly or indirectly. In China the last centuries before our era saw a remarkable quickening in astronomical knowledge and the florescence of new ideas. Rumours of a greater world and other civilizations began to filter through after the upheavals occasioned by the campaigns of Darius and Alexander. Active communication with Central Asian and Mediterranean lands followed the missions of exploration, diplomacy and trade sent by that enterprising monarch, Wu Ti of the Han, in the second century B.C. To Tsou Yen 鄒衍 of the fourth century B.C. is credited a book on *yin-yang* dualism and other lost works, and he is held to have been the chief promoter of belief in the Five Elements (*wu hsing* 五行), the theory that all phenomena depend upon the interactions of five essential constituents of nature: Wood, Fire, Earth, Metal and Water (*v.* 19, III 435, 436; 32, *passim*). Tsou Yen's activities are mentioned here because they helped to popularize notions which enter into the cosmic complex manifested in the design on No. 28, and are traced by some to foreign origins.

Among the crowded figures in the mirror's widest zone are the four mentioned in the inscription. "Dragon on the left and Tiger on the right ward off ill-luck; Scarlet Bird and Sombre Warrior accord with *yin* and *yang*." To give them their full names, the Dragon is the Green Dragon (Ts'ang 蒼 or Ch'ing 青 Lung) and the Tiger is the White Tiger (Pai 白 Hu). Commonly called the Four Supernatural Beings (Ssŭ Shên 四神), they symbolize the quadrants of the sky between the polar region and the equator and also the terrestrial equivalents; thus they have primary cosmic significance.

Notions concerning this group which were current about the time No. 28 was cast are given by Ssŭ-ma Ch'ien and Wang Ch'ung (*v.* 19, III 343,

346, 347, 350, 353; 32, I 106, 352, 353, 543). In a previous essay I tried from written accounts to gauge the antiquity of the conception (*v.* 130), and there is a passage in the *Li chi* (9, III 8-10), which should have been included, as Karlgren points out (58, 26, 27). The Four are not specifically named in the *Lü shih ch'un ch'iu*, but they are in *Huai-nan Tzŭ*. With data derived from the latter source (78, III) I have drawn up a table (Fig. 37) which serves as a summary of certain correspondences and provides a useful supplement to Figs. 35 and 36. The appearance here of a fifth animal, the Yellow Dragon (Huang Lung 黃龍), will be noticed. It symbolizes the Centre and the element Earth, and the reason for the choice of colour is not far to seek. Most of the land of ancient China is covered with yellow loess, the loamy soil which tinges the waters of the Huang Ho. There is

CREATURES	DIRECTIONS	SEASONS	DENARY SIGNS	ELEMENTS
GREEN DRAGON .	East	Spring	*chia i*	Wood
SCARLET BIRD .	South	Summer	*ping ting*	Fire
YELLOW DRAGON	Centre		*mou chi*	Earth
WHITE TIGER .	West	Autumn	*kêng hsin*	Metal
SOMBRE WARRIOR	North	Winter	*jên kuei*	Water

FIG. 37 Table of correspondences, derived from *Huai-nan Tzŭ*

little room for the Yellow Dragon on mirrors, since a loop or perforated boss for the cord occupies the centre. That is partly why it is seldom represented. Its import, too, being merely terrestrial, the figure may be omitted from a cosmic scheme of symbols which is used to do duty for both heaven and earth.

The fourth column of Fig. 37 calls for remark, because it reveals the fact that the "Ten Stems" are brought into the elaborate scheme of correspondences. The manner of doing so is to divide the year roughly into five periods of seventy-two days each. Starting with the cyclical notation *chia tzŭ* for the first day of spring, the second day is called *i ch'ou*. Still following the ancient nomenclature of the sexagenary cycle, the seventy-third day of the year, which begins the second period, is termed *ping tzŭ*, the next *ting ch'ou*, and so on. Thus the latter halves of the couples used to name the

two initial days of all the five periods are the same. If these halves (*tzŭ* and *ch'ou*), derived from the duodenary set, be disregarded, there is left the complete denary set in a series of five pairs. Each pair is taken to designate the whole of the respective period of seventy-two days (*v.* 78, III 21). By such jugglery the denary signs are brought into the scheme of correspondences stated in Fig. 37, while the duodenary signs are allocated in a different manner, as may be seen on comparison with Figs. 35 and 36. An example of the application of this strange pseudo-science is found in the *Tso chuan*, relating to 525 B.C., where *ping tzŭ* and *jên wu* days are foretold to be calamitous, because then Water and Fire meet, and of course the two are incompatible (74, V 666, 668). On referring to Figs. 35-37, *ping* and *wu* are found equated with Fire, and *tzŭ* and *jên* with Water.

Previously the conclusion was reached that there is lack of evidence for the existence of the Four Animals as a symbolic group earlier than the Han (130, 31). Nothing has since come to light to disprove that view, so far as I know. A possible exception is now in the British Museum, a set of glass plaques with intaglio figures of the Four, originally inlaid with gold foil. Certainly they look archaic, and the rumour that they were found in the group of tombs at Chin Ts'un 金村 which are known to have yielded pre-Han objects, might carry some weight, if it could be substantiated (*v.* 128).

The mirrors, most prolific source of information concerning the motifs used by Han craftsmen, did not display the Four Animals before about the beginning of our era, according to present knowledge. Perhaps beliefs which flourished under the Wang Mang régime, as remarked on an earlier page, made the Four popular. As to written evidence, enough has been said here and in my previous study to suggest that the oldest specification of the Four may be the one in *Huai-nan Tzŭ* of the second century B.C., though perhaps the text of this work was no more immune from Han editing than that of the *Li chi*. Certain germs of the conception are apparent in the *Lü shih ch'un ch'iu*, and may consequently be assigned to the third century B.C. For instance, creatures described as scaly, feathered, hairy and shell-covered are equated, respectively, with East and green, South and red, West and white, North and black. See also the colours in the list of the Nine Regions (*sup.* p. 124).

Study of numerous mirrors dating from the Hsin period and after leads to the conclusion that on the whole their designs accord with the

cosmological standards which have been outlined in the foregoing pages. Is it possible, then, in the light of such standards to identify every figure in the wide, crowded zone of No. 28? No other type offers greater diversity of figures, except perhaps certain later mirrors which have the Twelve Animals represented and also a second animal set corresponding to the Twenty-eight "Mansions". But they are neatly arranged in their proper sequence, and present no problem. No. 28, on the other hand, challenges one's ingenuity to explain the heterogeneous crowd of thirty-four figures, not drawn solely from the animal kingdom. Obviously the first step is to compare all available examples of the same type as No. 28. Having done so, I find that the Four Animals are the only constant figures. The rest vary in number, form and position. Variation in position seems to exclude any attempt at astronomical representation, for instance, of the Twenty-eight "Mansions." Indeed, the question arises whether the figures, other than the Four, are not put on the mirror somewhat capriciously. Perhaps their function is partly to fill space and partly to portray that mysterious Otherworld of Taoist fairylore which held the popular imagination about the time when No. 28 was cast. Nevertheless, certain astronomical identifications are suggested in the following pages, but only tentatively.

For the detailed examination of the figures let us start at the eastern quadrant which corresponds to the beginning of the civil and climatic year. The most prominent figure therein, that of the Green Dragon, appears at the top or northern end. Of the Four Animals it is the only one whose form bears some resemblance to the configuration of stars within its quadrant. Accordingly the first six "Mansions" are called Horns (Chio), Neck (K'ang), Breast (Ti), Belly (Fang), Heart (Hsin) and Tail (Wei) of the Dragon (*v.* Fig. 35). The Chinese asterisms so named include stars in Boötes, Virgo, Libra and Scorpio.

Why is the Green Dragon associated with the east and spring? Perhaps there is some truth in the theory that the conception of such a creature as the dragon originated from the alligator which haunts the River Yang-tzŭ to the present day. When winter begins the alligator buries itself in mud, and it emerges from hibernation when life revives in spring—the dawn of the year typified by the daily rising of the sun in the east. The first asterism of the Horns (Chio) is a starry beacon of signal importance; for its appearance above the horizon marks the beginning of the new year (*li-ch'un* 立春).

"Chio is the head of the Green Dragon. [When it becomes visible] the animal world puts forth its horns and vegetation bursts into bud. It presides over the revitalization of nature" (93, 55). The bright star in Chio, corresponding to our Arcturus (α Boötis), is the first horn of the Dragon to appear, and it is followed by Spica (α Virginis), the other horn (*v.* 91, 377, 378).

Notions concerning the dragon, current at the time this mirror was made, are stated by Hsü Shên. "The dragon is the chief of scaly reptiles," he says. "It can hide, it can show itself, it can be tiny, it can be huge, it can be short and it can be long. At the spring equinox it rises into the sky, at the autumn equinox it sinks concealed in the deep" (49, XI B, 6). Here, then, are described both its limitless capacity for transformation, and its dualistic function linked with the seasons, since its activity lasts only half the year while *yang* overpowers *yin*. Though it is autumn when the sun dwells in the Eastern Palace or quadrant, the Chinese associate this quadrant with spring because it contains the full moons of spring.

Perhaps Greek notions contributed something to the Green Dragon. The constellation of Scorpio has its stars so disposed as naturally to suggest a tailed reptile. From the West news may have come of the scorpion conception which helped to establish astronomically the Dragon in a setting thoroughly consistent with Chinese tradition. Then, too, there is the antithesis between Scorpio and Orion, which as observed by the Greeks and equated with one of their myths may have provided another loan from this source (*v. inf.* p. 143).

A favourite adjunct to the dragon motif in Chinese art is the ball, often coloured red, portrayed in front of the creature's jaws. Commonly called a "pearl," its origin has been traced to the moon's disk, represented in this combination because of ideas associating the Green Dragon with the eastern quadrant where the full moon of spring appears. An alternative explanation is that it started from a solar symbol such as the one on this mirror. Observe under the Dragon's jaws a circle containing a cross, evidently a bird with wings outstretched in flight, represented thus in summary fashion to suit the scale of the design. Quotation of a passage attributed to the astronomer Kan Tê 甘德 of the third century B.C. is appropriate. "The Sun Star is west of [the asterism] Fang 房, and east of [the asterism] Ti 氐. The sun is the essence of the *yang* force. Since the cock has three legs, and

the crow has two, it is the cock which is in the sun, while the essence of the crow becomes the [Sun] Star which presides over the march of the sun (*t'ai-yang* 太陽) through the degrees. Because the sun is born in the east, this star is there" (*v.* 93, 124).

The foregoing can hardly be reconciled with the customary symbolization of the sun with a three-legged crow, and so to evade the difficulty L. de Saussure translates "le coq ayant trois (doights aux) pieds et le corbeau seulement deux." At all events, the fact is that the cock was recognized from ancient times as a primary solar symbol. It is aggressive and brave, and since it crows at the flush of dawn it seems to salute the rising sun—all in keeping with the vitally active, equinoctial, vernal and solar *yang*. The "indivisible" number "three" is also linked with *yang*—a notion of great antiquity manifested in the first hexagram of the *I ching* which comprises six unbroken lines. Three times three signifies superabundant *yang*, and so each line of this pre-eminently *yang* hexagram is called "nine" (*chiu* 九). Moreover, the encircled cross under the Dragon's jaws can reasonably be taken to symbolize the Sun Star because an antithetical circle containing a toad to symbolize the Moon Star appears close to the Tiger on the other side of the mirror. Schlegel identifies the Sun Star with χ Libræ (93, 123).

A note should be added that rare examples of mirrors like No. 28 have the two figured disks interchanged, *i.e.* a bird associated with the White Tiger and a toad with the Green Dragon. Such reversal may merely display the vagaries of craftsmen.

Besides the Yellow Dragon there are five birds in the eastern quadrant: one of doubtful species below the Dragon's tail, two quails, perhaps a pheasant, and a swan with the head of one of those elfin beings who appear on this and other mirrors, and are called fairy immortals or *hsien* 仙. Two of them, squatting face to face between the so-called **T** and **L**, seem unlikely to have astronomical significance. But possibly the quails typify the asterism Hsin, Heart or Centre of the Green Dragon, which is called also Quail Fire (Shun Huo 鶉火), and is equated with the Jovian sector called Great Fire (Ta Huo 大火). Quails are essentially linked with fire. Both the asterisms Wei and Chi, numbered 6 and 7 in Fig. 35, are associated with the pheasant (*v.* 93, 155, 165, 166, 170). One name for Wei is Celestial Fowl or Cock (T'ien Chi 天鷄), and, if not a pheasant, the bird denoted may be one whose habit of heralding the dawn justifies its presence here.

The southern quadrant on this mirror is confined to birds, except for the presence of an immortal riding a deer at the western end. Opposite to the latter is the Scarlet Bird, symbol of the quadrant, looking like a peacock. Semblance of its form is traced in all seven asterisms within the quadrant, namely, Ching, Kuei, Liu, Hsing, Chang, I and Chên which are numbered 22 to 28 in Fig. 35, and correspond to Gemini, Cancer, Hydra, Crater and Corvus. Taken in the same order, the seven are likened, with some exercise of the imagination, to the head, eyes, beak, neck, breast, wings and tail of the Scarlet Bird. There is little in common between peacock and quail, yet the archetype of the symbol seems to have been a quail. That may account for the presence of at least two quails here. Moreover, the Jovian sectors corresponding to this quadrant are called Quail's Head, Heart (or Centre) and Tail (*v.* Fig. 35). The Scarlet Bird is variously identified with phœnix, pheasant and eagle (or falcon); but with the quail it has the closest astronomical affinity (*v.* 127, II 35, 36). As to the other birds in this quadrant of the mirror, one looks like a cormorant, and another may possibly be the Untamed Fowl (Yeh Chi 野鷄), a star which belongs to our Lepus (*v.* 93, 428-430). *Yeh chi* is the current colloquial term for the pheasant.

A line of the rhymed inscription on this mirror runs: "Scarlet Bird and Sombre Warrior accord with *yin* and *yang*." As we shall see when we reach the middle of the northern quadrant, domain of the Sombre Warrior, the winter solstice marks the maximum power of *yin*. From that point *yang* begins to quicken; it grows until it reaches highest intensity at the summer solstice, the middle of the Scarlet Bird's domain, corresponding to the fifth month, noon, and the time of greatest heat. If we turn to the old calendar in the *Li chi* concerning the fifth month of the year or the second of summer, we find: "In this month the longest day occurs; *yin* and *yang* are in conflict; death and life are equally divided." According to the T'ang commentary, the fact of the longest day is evidenced by the Grand Archivist's water-clock which records at the summer solstice 65 degrees of daylight and 35 of night. Also, "when the *yin* emanation starts to quicken, half creation is dead and half is alive. . . . Things which thrive under the influence of the *yang* emanation live, those susceptible to *yin* are dead, so at the summer solstice death and life are equally divided" (9, XVI 6). Thus the Scarlet Bird and the Sombre Warrior accord with the interactions of *yin* and *yang*.

As befits its importance as symbol of the western quadrant, the White Tiger is given prominence in this part of the mirror, where it appears at the southern end. Unlike the eastern quadrant of the sky which contains a recognizable semblance of the Dragon's form spread over all the seven "Mansions," here the Tiger is equated more fancifully with only three: Pi, Tsui and Shên, numbered 19 to 21 in Fig. 35. To the first, comprising the Hyades of Taurus, is assigned its mouth; to the second, our Orion's Head, is its head; to the third, identified as α, β, γ, δ, ε, ς, and χ Orionis, is its body. The Tiger's Tail is another name for Fa 伐, the three stars which we call Orion's Sword (93, 370, 399). The *Shuo wên* says of the tiger that it is "Lord of mountain animals" (49, V A, 8). Here, then, is a perfect antithesis to the symbol for the opposite quadrant, the Dragon, chief of scaly reptiles, whose abiding place is the watery deep (*v. sup.* p. 139). The way the two balance each other with contrasting qualities and activities is brought out by Wang Ch'ung. He regards the year as divided into summer and winter rather than four seasons. One passage is as follows: "Tung Chung-shu 董仲舒 expounds the allusion in the *Ch'un-ch'iu* to rain-sacrifice as referring to the practice of setting up an earthen dragon in order to bring rain. He means that clouds and dragons exert reciprocal influences. The *I ching* says that clouds come after dragons, and wind after tigers. It was in accordance with such associations that an earthen dragon was set up. *Yin* and *yang* follow their affinities; clouds and rain come as a natural sequence." The quoted comment by Tung Chung-shu, a scholar of the second century B.C., relates to the entry of two characters "Ta yü 大雩" for the year 707 B.C. (*v.* 74, V 44, 46). In a later passage Wang Ch'ung says: "Tigers emerge at a certain time just as dragons appear at their appointed season. The *yin* creatures come out in winter, the *yang* reptiles in summer. Their advents accord with the breaths which animate them, and these breaths quicken each its respective affinity. Shên 參 and Fa 伐 appear in winter, and Hsin 心 and Wei 尾 in summer. The former are stars of the Tiger, the latter belong to the starry configuration that resembles the Dragon. When they appear, the creatures become visible; when their breaths are present, the affinities are quickened" (117, XVI 1, 6).

The foregoing explains some of the correspondences involved with the western quadrant complex (*v. sup.* p. 136). Metal is white, and so is the Tiger. Autumn, season of decay and sadness, typifies the reign of war and

death; and tigers imply aggression because their habit is in autumn to descend from mountain forests to search for prey in the plains. Anciently and until modern times the tiger has served in China as a warlike emblem, in common metaphor and in the adornment of armour, shields, etc. Autumn is the time, too, when malefactors were punished.

Dualism of Dragon and Tiger is founded, moreover, on the constellations Scorpio and Orion which chase each other eternally across the heavens, and so are marked out as an opposing pair. Thus arose the Greek myth that Earth, terrified by Orion's threat that he could root out every wild creature from Crete, sent forth a scorpion to kill him with its sting. In the *Tso chuan* there is the parallel myth of two quarrelsome brothers who continually sought each other in combat (**74**, V 573, 580). Perhaps the Greek myth of Orion inspired the Chinese symbolic conceptions of the Fighter (Fa 伐) and the White Tiger (*v.* **91**, 163). According to Homer (*Od.*, XI 672), Odysseus watches Orion in the nether regions pursuing the animals whom he slew upon earth. At all events, the coincidence is strange that both Greeks and Chinese saw in Orion an armed man, for there is little in the configuration of its stars to suggest such an idea. The parallel, however, is not exact, Orion being essentially a hunter and Shên a warrior.

Allusion has already been made to the figured disk in front of the White Tiger on this mirror. The figure within the circle is obviously a toad, and the toad is a sort of surrogate of the hare, the primary symbol of the moon, just as the crow is a secondary solar emblem. For the astronomical significance of this disk, again we turn to Kan Tê, who is reputed to have said: " The Moon Star is south of [the asterism] Mao 昴, and north of [the asterism] Pi 畢. The moon is the essence of the *yin* force. Since the hare has four legs, and the toad has three, it is the hare which is in the moon, while the essence of the toad becomes the [Moon] Star which presides over the march of the moon (*t'ai-yin* 太陰) through the degrees. Because the moon is born in the west, this star is there. The essence of the sun is in Ti and Fang; the essence of the moon is in Mao and Pi. These [' Mansions '] themselves preside over the march of sun and moon through the degrees; for Ti, Fang, Mao and Pi are traversed by the ecliptic, and cannot therefore do otherwise than preside over it " (**93**, 124, 125).

Schlegel identifies the Moon Star as A 766 Tauri (**93**, 356). Two stars were chosen to mark the annual revolutions of sun and moon: the Sun

Star at the place of sunrise at the vernal equinox, the Moon Star at the place where the new moon appears in the evening of the autumnal equinox. Hare and toad as lunar symbols existed in China towards the end of the first millennium B.C. An allusion in the *T'ien wên* 天問 by Ch'ü Yüan 屈原 dates the hare conception in the fourth century B.C.; the toad in the moon is mentioned in *Huai-nan Tzŭ* (**78**, VII 4); and there is the evidence derived from the astronomer Kan Tê in the passages cited above. Kan Tê's remark about the superiority of the hare to serve as a lunar symbol, because it has four legs, is based on the belief that certain numbers have peculiar potency. Four is an even and divisible number which therefore accords with *yin*. But the statement that the toad has three legs seems only explicable if we suppose that the habit then existed of representing the toad thus, as it has been represented in later times; for three is, of course, a *yang* number (*v. sup.* p. 140), and a three-legged creature can be but a second-rate symbol for a *yin* luminary. On this mirror and the Shan-tung bas-reliefs the toad certainly is shown with four legs (*v.* **20**, figs. 20, 31, 53).

As to the five birds and two quadrupeds which fill the rest of the western quadrant, I am at a loss to explain them in a satisfying manner.

Much of the northern quadrant of this mirror on its western side is occupied by the couple, tortoise and serpent, called the Sombre Warrior. According to the astronomer Shih Shên 石申, who lived in the fourth century B.C., configurations of these two creatures, either singly or combined, are recognized among the seven asterisms numbered 8 to 14 in the outermost circle of Fig. 35 (*v.* **93**, 172). Taken in this order, Tou comes first on the eastern edge of the quadrant. It is equated with serpent entwined with dragon partly because of its contiguity to the eastern quadrant. Moreover, both serpent and dragon announce the new year, the one at the end of winter, the other at the beginning of spring, when they emerge from hibernation. Both, too, are of the same nature, being scaly reptiles. Next, Niu resembles the serpent, Nu the tortoise, and the last four asterisms, Hsü, Wei, Shih and Pi, suggest the forms of tortoise coupled with serpent. The figures in the northern quadrant of the mirror, remaining to be accounted for, are frog, four quails and a strange creature at its eastern end. There was a common Chinese belief that during winter pheasants and their near relatives the quails entered into the water and became frogs, to be retransformed at the coming of spring. Now, in this quadrant there is an asterism

corresponding to five stars of Delphinus, which is sometimes called the Celestial Pheasant (T'ien Chih 天雉), and that may explain the presence here of quails and frog (*v.* **32**, I 326, 336, 368; **93**, 213). All that I can say about the creature at the eastern end of the quadrant is that often on this kind of mirror it appears so placed.

A perplexing problem is offered by the name Sombre Warrior as applied to the combination of tortoise and serpent. Various attempts have been made to reconcile the tortoise's characteristics with the name, and they are not very satisfying. For instance, its carapace and plastron are likened to a soldier's body-armour. There is the legend, too, of a demon king transformed into a tortoise which vanquished the Sombre Emperor at the time of the last Shang-Yin emperor (**19**, I 47). The coupling of tortoise with serpent is traceable partly to the Chinese notion that all tortoises are female. That arises from the anatomical fact that, the genitals of the tortoise being hidden within a cloaca, there is no external visible organ to mark the sex. Tortoises do not go in pairs, but live independent and seemingly celibate lives; hence the belief that fecundation can be achieved only by mating with another creature, the serpent. According to the *Shuo wên*, creatures like the tortoise and turtle are female only, and the serpent functions as the male (**49**, XIII B, 2). Attribution of this single sex to the tortoise is encouraged by recognition of its characteristics as partaking of *yin*. It is dark in colour; its slow and clumsy movements give an impression of feebleness; it is patient, cold-blooded, fond of moisture and prone to hide, the last characteristic being exemplified by its habit of hibernation during the three months of winter. Apart from the fanciful astronomical identifications mentioned above, there are two groups of stars in the northern quadrant which really do suggest the shapes of tortoise and serpent. One is called Pieh 鼈, Turtle, and corresponds to our Corona Australis (**93**, 177, 178). The other, called Celestial Serpent, has been previously mentioned (*v. sup.* p. 20). Here, then, is a tangible basis for the Sombre Warrior conception, and it claims special attention if the fighting spirit shown by certain chelonians be taken into account. The common terrapin (*Trionyx sinensis*), for instance, is partly carnivorous and might attack snakes; it is known to defend itself fiercely when disturbed.

In short, the Sombre Warrior complex is not so irrational as might appear at first sight. Perhaps L. de Saussure is near the clue to the enigma

when he points to the antipathy between pig and serpent (**91**, 328, 329; **92**). He says that pigs are specially fond of eating snakes, and that in many parts of the world pigs are employed to destroy snakes, a statement which I am able to confirm. Moreover, pigs are said to be immune from snake-bites, probably owing to their tough skin and the underlying fat. Concerning this aspect of pig life, attention may be called to a passage in the *Tso chuan* which seems not to have been understood. It narrates the attempt of a Ch'u official to obtain aid for his State against the aggression of Wu. The official is quoted as saying: 吳爲封豕長蛇以荐食上國, which Legge translates: " Wu is a great pig and a long snake, bent on eating up the superior States, one after another " (**74**, V 752, 757). This rendering accords with the Chinese commentator's explanation that Wu is likened to pigs and snakes in greed and harmfulness (**109**, LIV 27). But surely the true meaning is thereby missed; the simile is really that of a pig eating a snake which is so long that the pig has to take repeated bites to finish it. The snake is the attacked, not the attacker, and its length is compared to the long succession of States invaded or about to be invaded by Wu. For our present purpose the value of this passage lies in the proof that the pig's propensity for eating snakes was known well enough to provide a metaphor. The date may be put at about the fourth century B.C., when probably the *Tso chuan* was compiled. In the first century A.D. the knowledge was still current, as may be gathered from a passage by Wang Ch'ung, to be quoted presently; and in the famous sixteenth-century materia medica, among the numerous remarks on natural history, there is the statement that the wild pig eats snakes (**76**, LI A, 20).

But how can the antipathy between pig and snake help to solve the problem of the Sombre Warrior complex? The answer is that the introduction of the Twelve Animals conception, not long before the beginning of our era, caused disturbance to earlier astronomical standards. Some confusion resulted from admixture of old notions with new. The names of the Twelve Animals and the correspondences assigned to them are set out in Fig. 36, and further correspondences, including the Five Elements complex, may be recognized on combining the above-mentioned table with Fig. 37. An integral part of this elaborate, pseudo-scientific system is the assimilation of the Twelve Animals with respective signs of the duodenary set, as is manifest from the fact that Wang Ch'ung calls them Creatures of the

Twelve *Ch'ên* (*shih êrh ch'ên chih ch'in* 十二辰之禽). The passage in question is an amusing demonstration of some queer anomalies resulting from the system (*v.* 32, I 104-107). Specially relevant to the present argument is the extract: "The sign *hai* 亥 is Water; its animal is pig. The sign *ssŭ* 巳 is Fire; its animal is snake. The sign *tzŭ* 子 also is Water: its animal is rat. The sign *wu* 午 also is Fire; its animal is horse. Since Water conquers Fire, pig eats snake; and since Fire is harmed by Water, the horse has a swollen belly after it has eaten the droppings of rats" (117, III 21). A point to note is that Wang Ch'ung accepts without cavil the eating of snakes by pigs, presumably because he knew it as a fact. He ridicules, however, some other implications of the system. For instance, he asks: "Why does rat not drive away horse, since Water overpowers Fire?" Again: "If Fire conquers Metal, why does not snake eat monkey, since the sign *shên* 申 (linked with Metal) is monkey? Moreover monkey fears rat, although Metal is stronger than Water."

Assimilations of *hai* with pig and of *ssŭ* with serpent were strengthened by long-established fancy that the configurations of three asterisms resembled the two animals, and moreover by certain false analogies prompted by the new system of correspondences. As to the astronomical parallelism, we have already noticed the presence in the northern quadrant of the asterisms Shih and Pi which correspond to our Square of Pegasus (*v. sup.* p. 144). Another name for the two asterisms, which originally were regarded as one, is Shih Wei 豕韋, Enclosure of Pigs (93, 281). Close by to the north is the Celestial Serpent, the twenty-two stars of which are so disposed as to suggest this name (*v. sup.* p. 20). When the author of the *Shuo wên* equated the *ku wên* form of *hai* 亥 with *shih* 豕, the pig, doubtless he was expressing a notion then current. It is a false analogy, presumably prompted by the placing of the duodenary sign *hai* and the zodiacal animal pig to correspond to the asterism Shih Wei. The placing of the duodenary sign *ssŭ* 巳 and the zodiacal serpent (*v.* Figs. 35, 36) diametrically opposite to *hai* and pig in the uranoscope resulted from the introduction of the Twelve Animals and their assimilation with the duodenary signs. This separation of the zodiacal and astronomical serpents seems to have been encouraged by the current identification of *ssŭ* with a serpentine form as reflected in the *Shuo wên*. That the identification is mistaken was the conclusion reached when the problem of *tzŭ* and *ssŭ* was treated (*v. sup.* pp. 20, 21). As to the date when the error

started, the evidence afforded by a narrative relating to the beginning of the fifth century B.C. was cited (*v. sup.* pp. 20, 21). But the fact that the book was written in the first century A.D. arouses distrust of its historical accuracy, the more so since the balance of evidence from all sources seems to indicate the Former Han as the period when the Twelve Animals complex was introduced. At all events, by the time the mirror No. 28 was cast, the notions under discussion were firmly established. The pair *hai* and pig and the pair *ssŭ* and serpent were opposed, and they represented the end of winter; for then the sun was in *hai* and the full moon in *ssŭ*. This opposition, confirmed by the well-known antipathy between pigs and snakes, may have been transferred to the two asterisms in the northern quadrant—Turtle and Celestial Serpent. Thus the tortoise may have become endowed with the pig's fighting qualities, and coupled with serpent it became the Sombre Warrior.

At the beginning of this article (p. 116) brief allusion was made to the "so-called **T L V**", that being the customary mode of describing the angular, guttered forms in the figured field surrounding the square. It is appropriate enough so far as the mere shapes are concerned, as may be seen on turning to Plate XXXI. Writing eight years ago, I rashly remarked that the **T L V** label is "so conveniently simple that it is not likely to be dropped in favour of a more reasonable, but more cumbersome alternative" (127, II 33). Nevertheless, an alternative, not quite so simple, but more reasonable, is now proposed because it explains why these forms were put on mirrors—obviously not for a decorative purpose. The alternative is "sun-dial," and in the following pages I shall attempt to justify it.

A clue to the meaning of the ugly, angular forms is to be found in two of the Shan-tung bas-reliefs, and we owe the first recognition of it to Nakayama Heijirō 中山平次郞, quoted in a treatise on mirrors twelve years ago (34, 96). The bas-relief to which he referred appears in the *Kokka* 國華 (No. 233), but without allusion to the significance of the detail in question. It is republished by Chavannes together with a bas-relief from the tomb of Wu Liang 武梁 which gives a clearer presentment of the detail (20, figs. 104, 1270). An inked-squeeze, taken from the Wu Liang bas-relief nearly a century ago, is in my possession, and from it I made the accompanying drawing (Fig. 38). Comparison with the wood-block, purporting to copy the same original, in the famous archæological work of

1822 by the brothers Fêng is interesting, because it exemplifies the inaccuracy of their illustrations (*v.* 30, Stone Section, 230). The authors describe the scene as follows: "It is a banquet with an entertainment of music and dancing. The three persons sitting on the west are guests, the two kneeling on the east are hosts. Above are two tablets, but, since they lack inscriptions, one cannot tell the names that should have filled them. Table, dish, bowls, food and a big cauldron are in the middle. The man at the end is lifting a ladle in the act of dipping out the contents." That does not help us, however, to understand the square object. Among others who attempt to explain

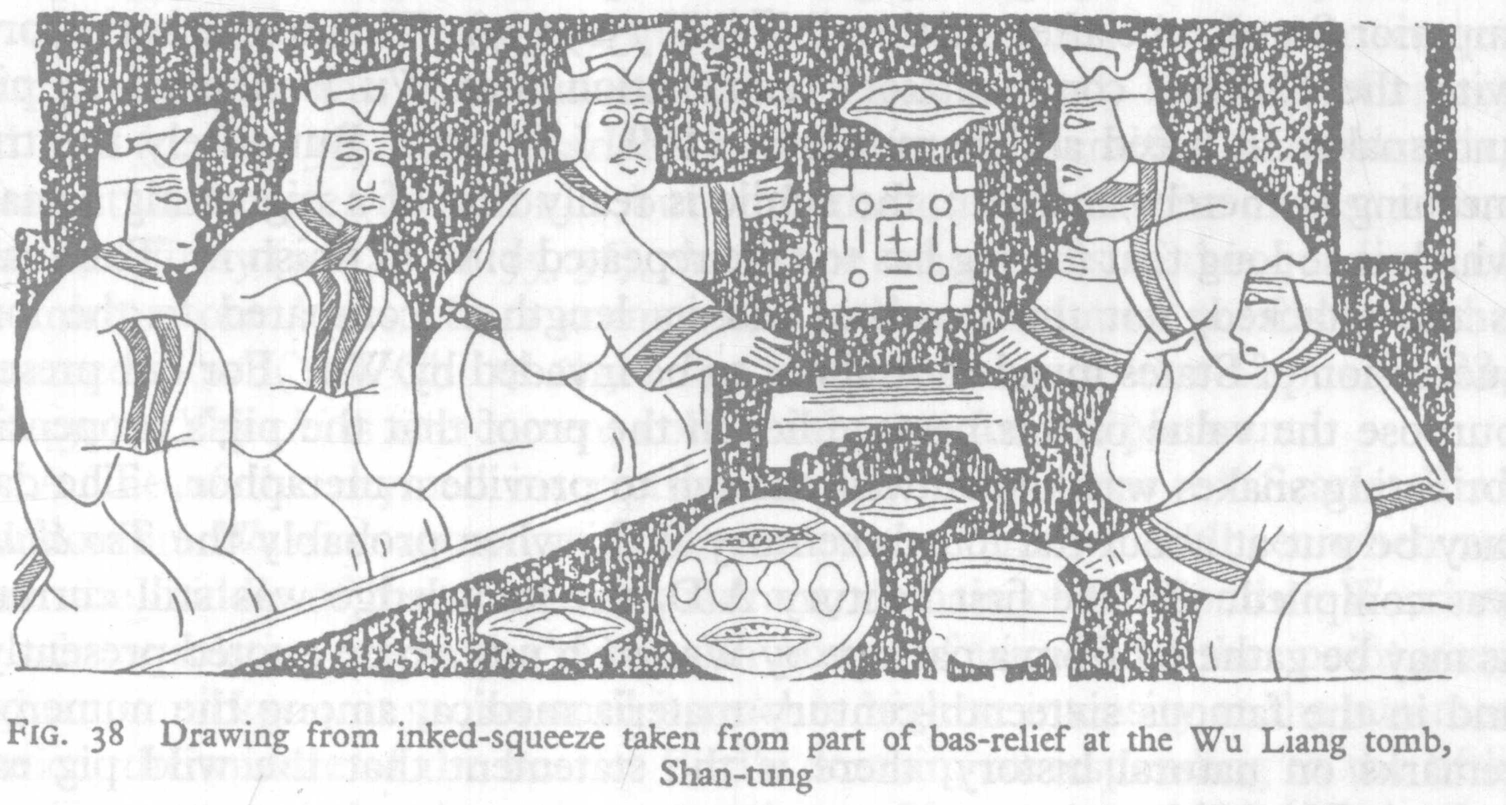


FIG. 38 Drawing from inked-squeeze taken from part of bas-relief at the Wu Liang tomb, Shan-tung

it, Laufer probably comes near the truth when he calls the scene a "representation of magic art," the audience being the three figures on the left, and the magicians the two on the right. The latter's "paraphernalia are displayed in front of them in the shape of a mat, dishes, a plate, a kettle, and a magic square (71, 35). Chavannes, on the other hand, regards all these as utensils of a meal, though evidently somewhat doubtful about the square object (20, I 184). In the Japanese treatise cited above the suggestion is made that it might be a chess-board imported from the West. A recent writer in America also remarks the resemblance to the so-called **T L V** mirrors, independently of the earlier identification, and thinks it may be the instrument for divination which is called *shih* (*v. sup.* p. 119). He cites for

comparison the remains of a *shih* recovered from a Han tomb in Corea as described by Harada (56).

None of these writers hints that the "magic square" might be a sun-dial. While proposing this solution of the problem, I have to offer only vague speculations as to the purpose of the sun-dial in the scenes of the two bas-reliefs. In both there appears, below the square dial, some object upon a stand which evidently had to be kept horizontal, a position it shares alone with the cauldron. The cauldron certainly holds fluid, because a man is ladling the contents. That surely was the reason which prompted the draughtsman to depict the cauldron in strict horizontal profile. No such constraint influenced his perspective when he tilted the bowls or dishes so as to display their solid contents which could not spill. Avoidance of a pose implying the spilling of the contents dictated also the strictly profile view of the object upon the stand. Of course an argument which assumes that the Han artisan followed a certain line of reasoning may be entirely fallacious. But I submit it tentatively for what it is worth, and conclude that the stand below the dial supports a bowl of water. Still more tentative is the suggestion that upon the surface of the water a rod of magnetic iron or loadstone is attached to a float and serves as a compass for the orientation of the sun-dial. While certain proof is lacking that the compass had been invented as early as the date of these bas-reliefs, about the second century of our era, there are allusions that suggest the possibility. Suspension by some means other than water would be inconsistent with the supposition that the object upon the stand below the dial had to be kept horizontal. Even if the compass theory be dismissed as too speculative, there remains a bowl of water, used for some sort of divination, as a plausible alternative. Fortune-telling is and always has been popular all over the world, and nowhere more so than in China. It might well be part of the entertainment, depicted in these bas-reliefs, which includes a performance of dancers and acrobats.

Identification with a sun-dial is based on two engraved stone slabs which have similar markings. The first belonged to the Tuan Fang collection, and an inked-squeeze of it is reproduced by photo-lithography in a catalogue (111, I 3), from which I have made a facsimile drawing (Fig. 39). The author of a recent book on mirrors includes among his illustrations a reproduction of this inked-squeeze, without believing that it has anything

to do with the so-called **T L V** forms on mirrors, which he takes to be "merely parts of the meandering pattern." On the other hand, Dr. Mueller,

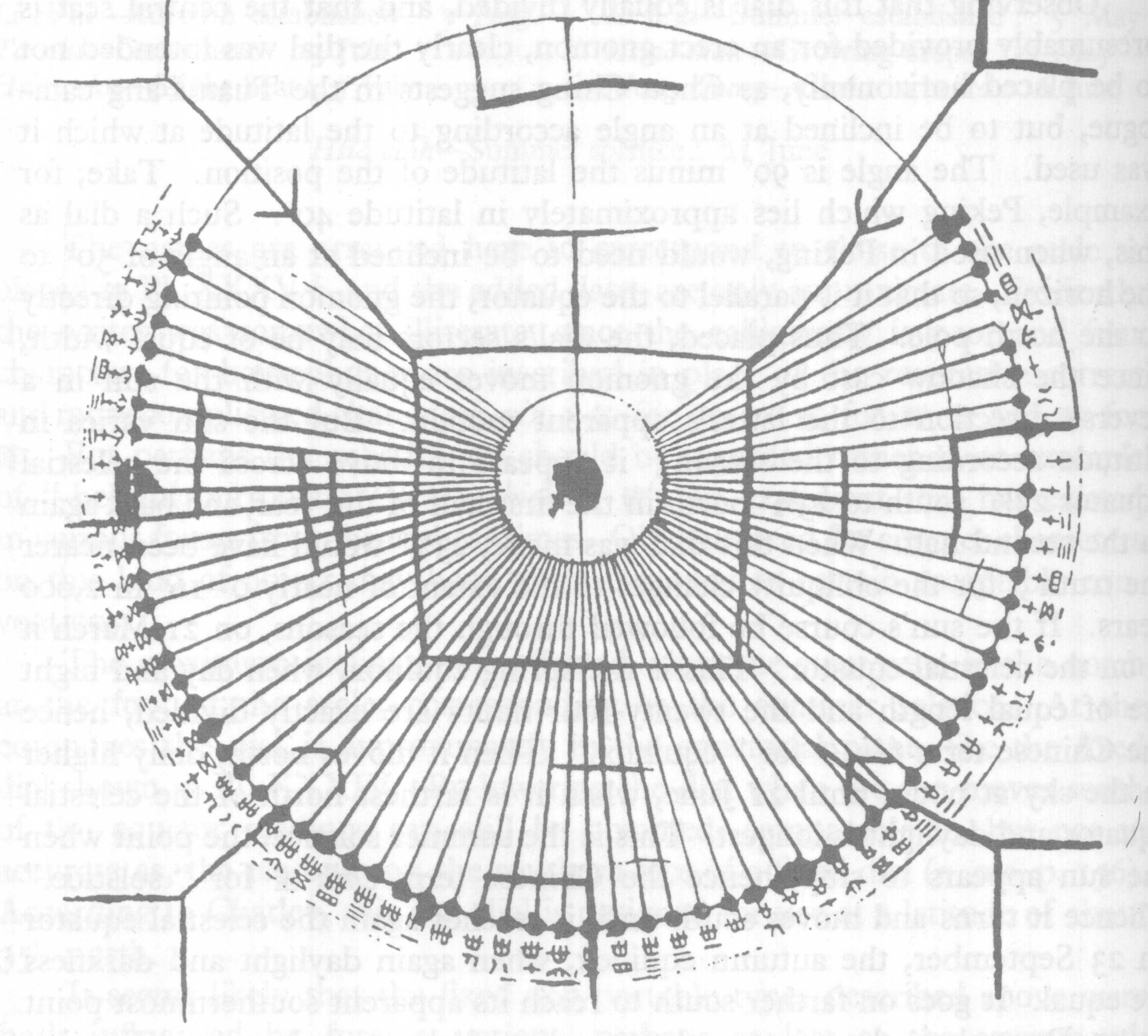


FIG. 39 Drawing from inked-squeeze taken from stone sun-dial formerly in the Tuan Fang collection About half actual size of dial

who had called the author's attention to the inked-squeeze, is reported to assign astronomical significance to the **T L V** forms, on the grounds of analogies presented by the Tuan Fang slab which is said to have "the

appearance of an astronomical instrument." The author continues: "unfortunately there are no records left explaining the uses of these ancient instruments, otherwise the learned doctor might have little difficulty in proving to us the truth of his theory with regard to these interesting signs" (*v.* 104, 17, fig. 15).

It seems strange that the "instrument" is not recognized for what it is, since in the Tuan Fang catalogue the inked-squeeze is labelled "sun-dial that measures shadows," *ts'ê ying jih kuei* 測景日晷, and nine pages are devoted to a discussion which includes explanations of the way this kind of sun-dial was used (111, I 3-8). The account opens with a note by T'ang Chin-chu 湯金鑄, who refers to Tuan Fang by his *hao*, T'ao-chai. A translation in full follows :—

"T'ao-chai, President of a Board, once showed me an anciently-made jade-slab sun-dial and an inked-squeeze taken from it. The slab is an inch thick; at its centre and all round its peripheral circle are round holes prepared as gnomon seatings. Investigation proves that the one in the centre of the slab is for the seating of a fixed gnomon, while those round the periphery serve for a movable gnomon. When the fixed gnomon points directly to the north pole, the face of the dial is in the equatorial plane. By so placing the movable gnomon that its shadow coincides with the fixed gnomon, the time can be ascertained.

"This mode of construction is very old, and it differs from the kind in current official use. A modern-made [sun-dial] has time-lines engraved on both front and back, and has only one gnomon which passes axially through its centre. From the vernal equinox to the autumnal equinox the shadow [cast by the gnomon] remains on the front of the dial; from the autumnal equinox to the vernal equinox it remains on the back. On the exact days of the two equinoxes, no shadow falls on either side, since then the sun is directly on the equator, in the plane of which the dial disk lies.

"With this make of dial [*i.e.* the one in the Tuan Fang collection], the shadows of the gnomons coincide, so that, no matter what the season, the sun-dial can be used. Hence the back of the slab need not be graduated with lines. Those of recent make follow the new method by which the day is divided into twelve [double-]hours, and the [double-]hour into eight parts, the day having ninety-six divisions in all. This make of dial follows the ancient method by which the day has a hundred divisions in all, and the

whole periphery is equally divided. The engraved lines are numbered 1 to 69 in 'seal' script. It can be used anywhere between Mongolia in the north and Ch'iung-chou 瓊州 (the Island of Hainan) in the south.

"On turning respectfully to the *[Li hsiang] k'ao ch'êng* [曆象] 考成, compiled by the Emperor [of the K'ang-hsi period], there is the following: 'At the capital, the altitude of the north pole being 39° 55', summer daylight and winter night each measures 59° 5' divisions, while summer night and winter daylight each measures 36° 10' divisions. The difference is 20° 10' [*sic*] divisions, and the higher the north pole the greater is the difference.' It follows that this sun-dial was designed for use further north, where the altitude of the pole is more than 50°.

"For the periphery of the dial, the basic plan of division is one of a hundred equal parts. The thirty-one lines are not marked; for during the equivalent period the sun has set and no shadow is cast, and that accounts for the omission.

"The foregoing are my views given in response to the request that I should contribute a note concerning the inked-squeeze. I do not know whether they are right or wrong."

Next in the catalogue come notes by Chou Ching 周暻, the salient points of which are as follows. The sun-dial is said to have been obtained at Kuei-hua-ch'êng 歸化城, a Shan-hsi city in latitude 41°. Its present owner is not known. The central hole for seating the fixed gnomon is about half an inch deep and three-tenths in diameter. Without giving measurements of the peripheral holes, the writer supposes that they were to mark permanently the ends of the radials in case the lines might get effaced by weathering. But this explanation is not convincing, and T'ang's theory that they are seatings for a movable gnomon is probably right, as we shall see presently. Chou thinks the sun-dial was used in a horizontal position, not to measure time but to indicate the cardinal points and the seasons. He says: "Since the altitude of the north pole is not the same in the south and in the north, and the march [of the sun] through the ecliptic causes mornings and afternoons to vary in length, one might just as well hope to measure time with a horizontal sun-dial as to expect to find a sword [which has been dropped overboard] by marking on the boat the place where it fell." That remark is certainly justified. For instance, the error would be several hours at 1 p.m. in latitude 35° when the sun was at

the summer solstice, though at the winter solstice the error would be small.

Since the graduation of a horizontal dial requires a knowledge of practical solid geometry, I doubt whether such a dial was made in China before the seventeenth century. Probably the knowledge was first introduced by the Jesuits.

A definite clue to the date of the sun-dial is the presence of the numeral for 7 written with a cross of which the horizontal stroke is longer than the vertical. As may be recognized on turning to Fig. 39, it might easily be confused with the numeral for 10, since the only difference in the latter is a reversal of the respective lengths of the two strokes. Indeed, one numeral has often been mistaken for the other; Chou gives instances, and so does an anonymous writer who follows him with a longer note on the numerals (111, I 6-8). To avoid such errors, the ancient mode of writing the numeral for 7 was abandoned about the beginning of our era for a form like the current 七. That fact almost certainly assigns the sun-dial to the Former Han or an earlier period. Probably, too, the markings on sun-dials were changed to one hundred and twenty divisions in A.D. 8; but this reform may have been only temporary (*v. inf.* p. 163).

It seems strange that neither of the contributors to the Tuan Fang catalogue even mentions the forms on the sun-dial which resemble the so-called **T L V** on the mirror under discussion. A gallant attempt to explain them is made by the late Liu Fu in an article which deals chiefly with the only other complete example known of an ancient Chinese sun-dial, one belonging to Bishop W. C. White (80). They are cut somewhat differently on the two dials, as may be recognized on comparing Fig. 39 with Fig. 40 which is drawn from an inked-squeeze kindly sent to me by the Bishop. The engraving on the second dial is uniformly well done, while on the Tuan Fang dial it is evidently the work of two hands, one skilled and the other unskilled and careless. It is the unskilled part which comprises the square and other forms paralleled on the mirror, probably added some time after the dial had been graduated.

Bishop White's sun-dial is said to have been excavated some seven years ago at Chin Ts'un, near the site of old Lo-yang where many finds have come to light recently. The circumstances of discovery are not known. It is a slab of limestone, about eleven inches square and one inch thick, the

back of which is plain. The central hole is five-sixteenths of an inch (·8 cm.) in diameter, and about half an inch deep. The diameter of the peripheral holes is about half that of the central hole, and their depth is about one-sixteenth of an inch (·16 cm.). Other approximate measurements (taken

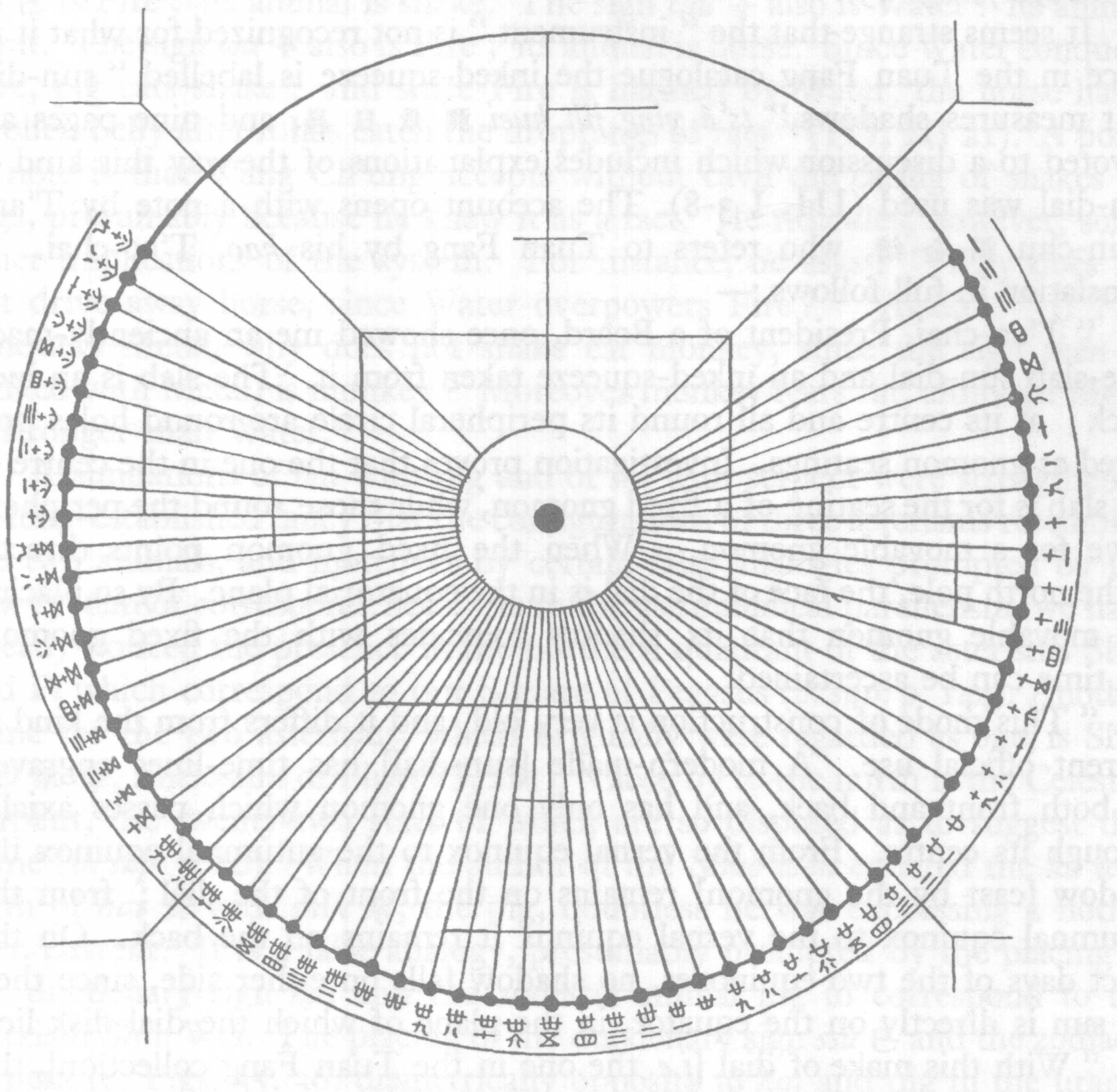


FIG. 40 Drawing from inked-squeeze taken from stone sun-dial belonging to Bishop W. C. White About half actual size of dial

from the inked-squeeze) are: Diameter of inner circle, 4·7 cm.; of middle circle, 24·8 cm.; of outer circle, 27·5 cm. Side of engraved square, 9·5 cm. Like the other dial, this one is graduated on the basis of a hundred equal divisions for a day and night of twelve double-hours, and has sixty-nine

lines radiating from the centre, thirty-two sectors being left unmarked on the side corresponding to night-time. Thus line 35 marks noon (*wu* 午); and lines 10 (*mao* 卯) and 60 (*yu* 酉) mark 6 a.m. and 6 p.m., respectively (*cf.* Figs. 39 and 40).

Observing that this dial is equally divided, and that the central seat is presumably provided for an erect gnomon, clearly the dial was intended not to be placed horizontally, as Chou Ching suggests in the Tuan Fang catalogue, but to be inclined at an angle according to the latitude at which it was used. The angle is 90° minus the latitude of the position. Take, for example, Peking which lies approximately in latitude 40°. Such a dial as this, when used in Peking, would need to be inclined at an angle of 50° to the horizon, so that it is parallel to the equator, the gnomon pointing directly to the north pole. Thus placed, the dial's sectors may be of equal width, since the shadow cast by the gnomon moves equally with the sun in a reverse direction to the latter's apparent motion. But the sun varies in altitude according to the season; it appears to move across the celestial equator 23½° south to 23½° north in the first half of the year, and back again in the second half. When this dial was made, 23¾° would have been nearer the truth; for the obliquity changes to the extent of nearly 0° 16′ in 2,000 years. If the sun's course be followed through the seasons, on 21 March it is on the celestial equator. This is the spring equinox, when day and night are of equal length and the twenty-four hours are exactly divided, hence the Chinese term *fên* 分 for "equinox." Then it moves north, daily higher in the sky at noon, until 21 June, when it is farthest north of the celestial equator and daylight is longest. This is the summer solstice, the point when the sun appears to stop, hence the Chinese term *chih* 至 for "solstice." Thence it turns and moves south until it reaches again the celestial equator on 23 September, the autumn equinox, when again daylight and darkness are equal. It goes on farther south to reach its apparent southernmost point on 21 December, the winter solstice, when darkness is longest. Turning about, it moves north, and in the course of three months arrives again at the starting point on the celestial equator.

A sun-dial disk placed in the equatorial plane receives the sun's rays on its northern face during the first half of the year and on its southern face during the second half, but on neither face at the equinoxes, since then the dial is parallel to the sun's rays. Accordingly, the practice was adopted in

China of graduating both faces of such a sun-dial, and providing a long gnomon of iron or bronze which passes through the centre of the disk in the

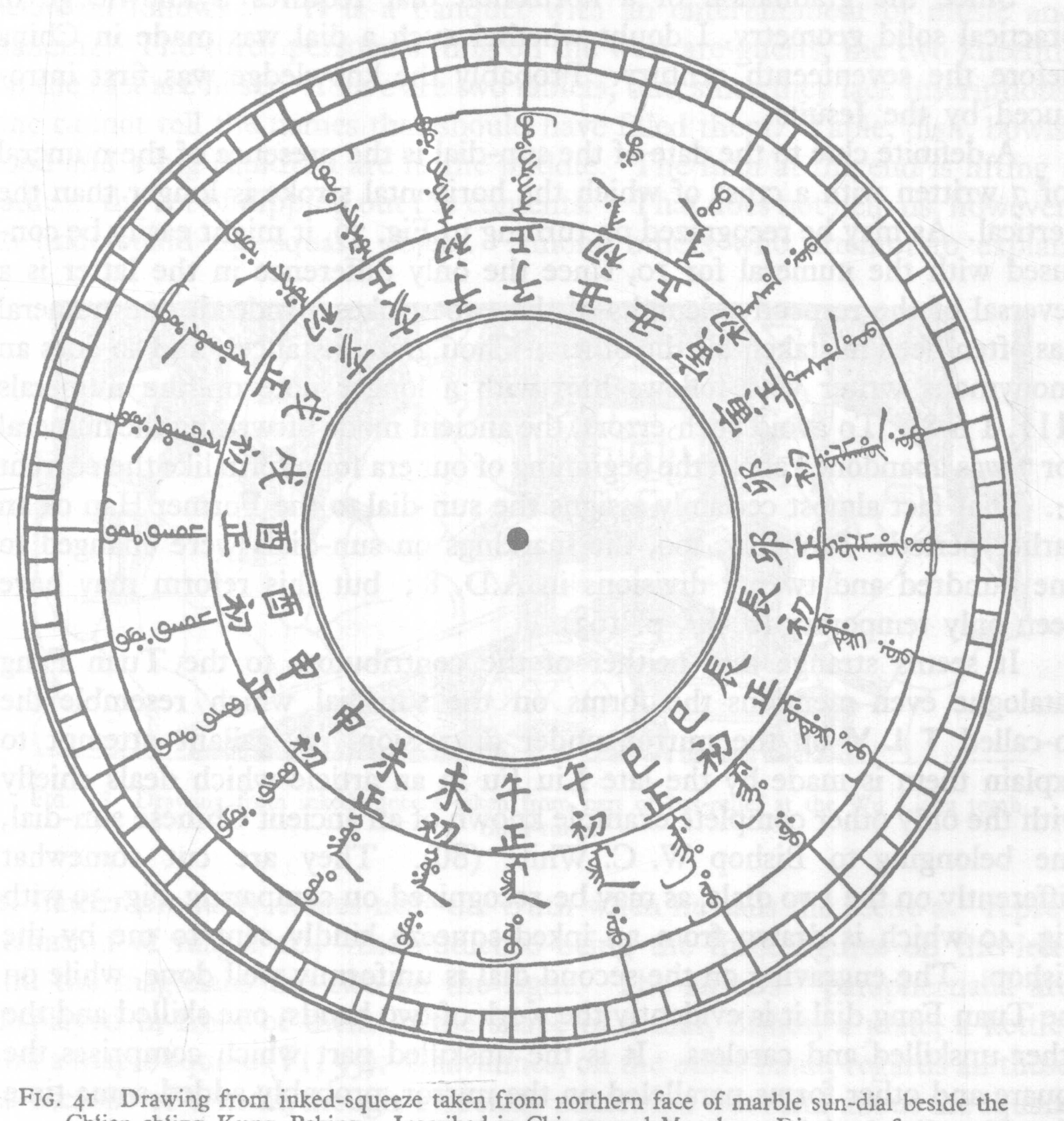


FIG. 41 Drawing from inked-squeeze taken from northern face of marble sun-dial beside the Ch'ien-ch'ing Kung, Peking Inscribed in Chinese and Manchu Diameter of outermost circle 49 cm.

polar axis and extends beyond each face to a length about equal to the radius of the dial. This is the arrangement found among the palace buildings in Peking. An example is the imposing structure of white marble about ten

feet high in front of the T'ai-ho Tien 太和殿, the chief audience-hall (Pl. XXXIV). It stands upon the top of the terraced platform of the hall, in the south-eastern corner, facing north and south with the disk inclined in the equatorial plane. From the evidence offered by the gnomon's shadow, as here recorded, the photograph was taken between the autumn and spring equinoxes, and the hour was *shên* 申 (about 3 p.m.), the shadow moving anti-clockwise round the dial viewed from below. On the upper side or northern aspect of the marble disk the order of the duodenary signs is clockwise. Fig. 41 is drawn from an inked-squeeze of the northern face of a sun-dial beside the Ch'ien-ch'ing Kung 乾清宮, another palace building in Peking. No doubt the corresponding face of the T'ai-ho Tien sun-dial resembles it.

For comparison with the fixed sun-dial, let us examine a portable kind which also depends on the sun's position in the sky for the indication of time. On Pl. XXXV is a modern example presented to the Science Museum, Kensington, by Dr. Herbert Chatley. Embodying a compass in order that the dial may be properly set facing due north, it exemplifies a need which prompted the speculation that perhaps a compass is represented among the paraphernalia in the two Shan-tung bas-reliefs (*v. sup.* p. 149). The dial itself (Pl. XXXV *c*), marked with the Twelve *Ch'ên* and ninety-six equal divisions, is a counterpart to the northern face of fixed sun-dials in the Peking palace (*v.* Fig. 41). The words *shang pei*, "to face north," are inscribed on it. Its gnomon, too, is at right angles to the dial, at least, that is its position when erect as shown in *a*; for, being a hinged pin, it is laid flat when not in use. The dial also is hinged so that its inclination can be varied appropriately to the time of year. This is done by means of a hinged strut, attached behind it, which can be placed in one or other of thirteen notches corresponding to a scale of *chieh ch'i* 節氣, successive solar periods throughout the year. A photograph of the scale is given in Pl. XXXV *b*. Labelled with four large characters *ssŭ hsü t'iao yüan*, meaning "adjustment cycle according to the four seasons," it reads as follows :—

Tung chih—Winter solstice : 21 Dec.

Ta hsüeh—Heavy snow : 7 Dec.	*Hsiao han*—Slight cold : 6 Jan.
Hsiao hsüeh—Little snow : 22 Nov.	*Ta han*—Great cold : 21 Jan.
Li tung—Winter established : 7 Nov.	*Li ch'un*—Spring established : 5 Feb.

Shuang chiang—Frost descends : 23 Oct.	*Yü shui*—Rain water : 19 Feb.
Han lu—Cold dew : 8 Oct.	*Ching chih*—Awakened insects : 5 March
Ch'iu fên—Autumn equinox : 23 Sept.	*Ch'un fên*—Spring equinox : 21 March
Pai lu—White dew : 8 Sept.	*Ch'ing ming*—Clear and bright : 5 April
Ch'u shu—Heat abated : 23 Aug.	*Ku yü*—Rain for crops : 20 April
Li ch'iu—Autumn established : 7 Aug.	*Li hsia*—Summer established : 5 May
Ta shu—Great heat : 23 July	*Hsiao man*—Growing crops : 21 May
Hsiao shu—Slight heat : 7 July	*Mang chung*—Grain in beard : 6 June

Hsia chih—Summer solstice : 21 June

The names are arranged here to correspond to those of the scale as placed in Pl. XXXV *b*, and the added dates are only approximate. Evidently the writer was somewhat illiterate, since the calligraphy is poor and four characters for homophones are inscribed in place of the respective correct and more complicated characters, *viz.* : 谷 for 穀, 京 直 for 驚 蟄 and 路 for 露. But perhaps the substitution should be regarded rather as an example of "helpful borrowing" (*chia chieh* 假 借), an expedient that has existed in various forms from the earliest times. Obvious need for simpler characters on this kind of object may have given currency to certain acceptable conventions.

The maximum inclination is effected when the strut rests in the notch at the foot of the scale, corresponding to the summer solstice. At the equinoxes the dial is approximately in the equatorial plane, like the fixed dial shown in Pl. XXXIV. By lowering the dial when the sun moves south of the equator readings can still be obtained, comparable to, but not so accurate as, the readings on the southern face of a fixed dial (*v. sup.* p. 156). According to Chatley, this sun-dial is designed for use at a latitude of about 35° north.

It seems likely that the fixed and portable types described above were both influenced by foreign notions, perhaps as late as the seventeenth century. Liu Fu in his able article remarks the scantiness of information about Chinese sun-dials. The little available evidence indicates that anciently the water-clock was preferred to the sun-dial for accuracy of time measurement. He cites a passage in the *Sui shu* 隋 書 as the sole historical notice of the sun-dial as timekeeper. It relates to A.D. 594 when an official presented to the emperor a water-clock combined with a horizontal sun-dial, the latter being

used to check the readings on the other. The divisions on the sun-dial were twelve, one for each of the Twelve *Ch'ên*, and they were made unequal in size because of the dial's horizontal position. From what the account says, the graduation was faulty through lack of astronomical knowledge (80, 579). Liu surmises that the sun-dial was invented long before the water-clock ; since rough determinations of time by shadows thrown by the sun are known to have been made in remote antiquity. The advance of mechanical contrivances brought into vogue the water-clock for those able to afford it, and it offered the obvious advantage of functioning when days were cloudy and at night-time. Always the sun-dial continued in common use.

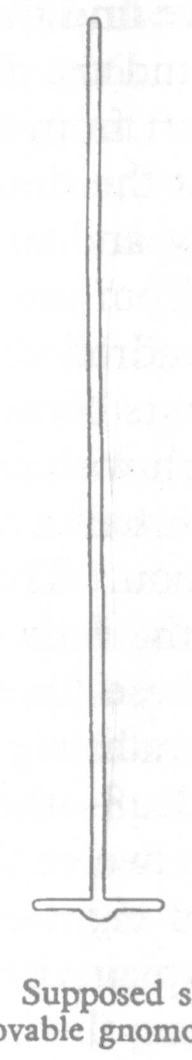


FIG. 42 Supposed shape of movable gnomon

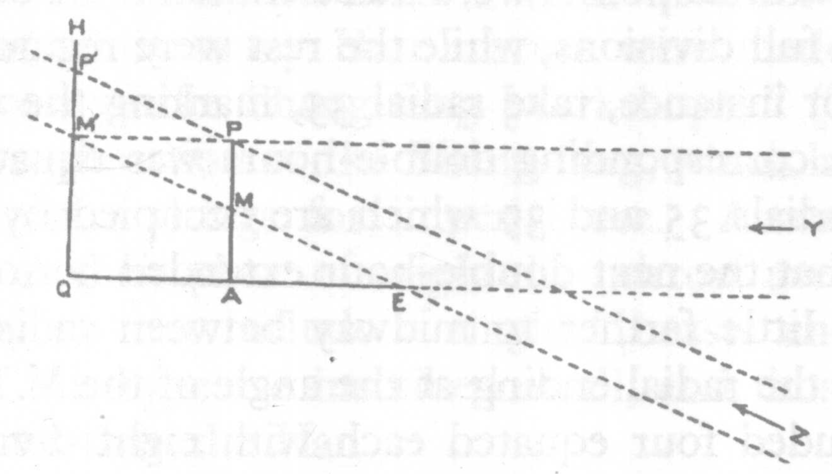


FIG. 43 Diagram copied from **80**, fig. 9

Having examined two kinds of Chinese sun-dials and the principles involved in their construction, we can now compare the type which seems to have suggested the curious **T L V** forms on No. 28. Evidently T'ang Chin-chu is right in his note quoted above when he states that the ancient type of dial must have been placed in the equatorial plane and worked with a movable gnomon. Liu Fu explains the method in detail and surmises that the movable gnomon may have been like the imaginary drawing in Fig. 42.

To the end of a bamboo, wood or metal shaft was attached a disk in the centre of which, on its lower surface, was a boss made to fit any one of the shallow holes cut in the periphery of the dial. While a reading was taken this contrivance could have been held in place with two fingers pressing on the disk, one on either side of the shaft. T'ang's sentence : "By so placing the movable gnomon that its shadow coincides with the fixed gnomon," is corrected by Liu, who writes instead : "By so placing the movable gnomon that it coincides with the shadow cast by the fixed gnomon."

To demonstrate the principle, Liu gives a diagram of which Fig. 43 is a copy. Q E is a dial in the equatorial plane ; A P is the fixed gnomon vertical to the dial at its centre ; Q H is the movable gnomon erected in one of the peripheral seats. The dotted lines represent the sun's rays as parallel, since the source is so distant that divergence is negligible for practical purposes. When the sun is above the celestial equator, its rays cast a shadow of the fixed gnomon upon the dial, and there is no need to have recourse to the movable gnomon—conditions not represented in this diagram. But when the sun is on the celestial equator, as at the equinoxes, its rays (figured Y) do not cast a shadow of A P upon the dial ; so Q H is moved until the shadow of A P falls on it at Q M'. The reading at Q, on the periphery of the dial, is then noted. When the sun sinks below the celestial equator, the dial remains in shadow, but the fixed gnomon is caught by the rays (figured Z) at M P, and the shadow of M P falls on the part M' P' of the movable gnomon, if the latter be suitably placed. Again a reading is taken at the seat of Q on the graduated periphery.

Without giving particulars, Liu states that this method of taking readings by means of a movable gnomon is known to have been practised under the Yüan and Ming dynasties. He supposes a period before that when it had fallen into disuse (80, 599). The two dials under discussion prove its existence under the Western Han or earlier, and evidence of an analogous procedure with a horizontal dial is forthcoming from a composite work some of which is at least as old as the third century B.C. For instance, it has this passage : ". . . mark the twenty-eight 'Mansions' on the periphery [of the dial], and, having fixed their positions, erect an upright gnomon in the centre of the graduated circle. Take observations on the days of the winter and summer solstices. When sunrise begins, erect a movable gnomon in the graduation where the shadow of the central gnomon falls,

and it indicates the 'Mansion' of the sunrise. The same method is used when the sun sets" (2, II 15).

Among the evidence which supports Liu's thesis that some of these ancient dials were used not solely for marking the hours, there is a passage concerning the famous astronomical congress in 104 B.C., the outcome of a memorial presented to the Throne by Ssŭ-ma Ch'ien and others urging calendar reform. The emperor directed the assembled savants to devise a Han calendar. "Thereupon they determined the points east and west, set up sun-dial and gnomons, and contrived water-clocks. With such means they marked out the Twenty-eight 'Mansions' according to their positions at various points in the four quarters, fixing the first and last days of each month, the equinoxes and solstices, the movements and relative positions of the heavenly bodies, and the phases of the moon" (90, XXI 10).

Our next line of inquiry is into the significance of the eight lines engraved on these two dials at right angles to the radii. In other words, we are concerned with the horizontals in the so-called **T** and **L** forms which appear carelessly engraved in Fig. 39, but neatly on the other dial. Liu Fu argues that these lines served to record two measurements equal to the respective heights of the shadows thrown on the movable gnomon by the fixed gnomon at the solstices. They were cut on the dial for convenience of reference whenever loss of or damage to the movable gnomon necessitated the provision and graduation of a fresh one. If this had been the sole function of the lines, one pair would have sufficed ; but Liu supposes that they were repeated for sake of symmetry, and also "to express the principle that determinations of the solstices and equinoxes could be made at the appropriate times in one or other of the four cardinal directions." One measurement is taken by Liu from the centre of the dial to the farther line, the second is taken from the other line to the circle which is holed for seating the movable gnomon. From calculations based on the dimensions of the two dials, and the angle between the ecliptic and equatorial planes, the conclusion is reached that the longer measurement equals the height of the shadow on the movable gnomon at the winter solstice, the other at the summer solstice (*v.* 80, 601-605, fig. 11). At the equinoxes, of course, the shadow on the movable gnomon is exactly the height of the fixed gnomon. If these arguments be accepted as plausible, we may reasonably go further and suppose an elaboration of the seasonal markings on the movable

gnomon. Between the limits corresponding to the solstices there might have been a graduated scale of eleven divisions for the twenty-two intermediate periods set out on pages 158 and 159.

Still left unexplained are the lengths of these transverse lines. As already noticed, the lines are cut so crudely on the Tuan Fang dial (Fig. 39) that they can hardly be part of the original markings. We must turn to the other (Fig. 40) for a criterion of normal practice, and there we find that each line crosses exactly four of the sectors. If the eye travels round the dial in a clockwise direction, each of the four outer lines is seen to start from a radial corresponding to one or other of the four cardinal points. At the time when these sun-dials were made, the custom being to divide day and night together into twelve double-hours, obviously some departure from uniformity was unavoidable in apportioning the twelve among the hundred divisions of a dial. According to Liu's hypothesis, the four double-hours corresponding to the cardinal points were those chosen to be equated each with an equal number of full divisions, while the rest were regarded each as half a division longer. For instance, take radial 35, marking the time at noon. The latter half of the corresponding double-hours was equated with the four sectors between radials 35 and 39 which are occupied by one of these lines. Liu supposes that the next double-hour extended not only from radials 39 to 47, but also a little farther to midway between radials 47 and 48—the point marked by the radial ending at the angle of the **V**. Thus the twelve double-hours included four equated each with eight divisions, and eight equated each with eight divisions and a half. This ingenious theory explains plausibly not only the mode of allocating the twelve double-hours among the hundred divisions, but also the lengths of these enigmatic transverse lines and the presence of a radial drawn from each **V** (80, 610). There still remains, however, the question why each of the four inner lines likewise crosses four sectors. Perhaps the answer again is that considerations of symmetry prompted the arrangement.

A fact not mentioned by the writers cited above is that one of Wang Mang's innovations was to change the mode of marking sun-dials. At least, we may assume as much from the record in his biography that in A.D. 8 water-clocks were graduated in one hundred and twenty divisions (90, XCIX A, 27). Probably the marking of sun-dials was changed to tally with that of the water-clocks, in which case the twelve double-hours would have

fitted exactly into the scale. Each quadrant on such a dial would have been bisected by a radial which when prolonged would have met the point of a **V**.

Either on dials with a hundred divisions, such as we have examined, or on hypothetical dials with one hundred and twenty divisions, the **V**s mark the four octants between the cardinal points. Their counterparts on the mirror under discussion correspond to the points of the larger quatrefoil. Indeed, together with the uprights of the four **T**s, they repeat in the zone crowded with animal figures the symbolic import of the combined quatrefoils in the centre (*v. sup.* p. 123).

Thus the **V**s on the dials reproduced in Figs. 39 and 40 answer a purpose besides that of time measurement. They indicate the directions midway between the four cardinal points; and, as stated before, the primary use of a sun-dial was to help certain astronomical observations rather than to tell the hour of the day. An explanation of their utility, does not, however, account for the markings being **V**-shaped. To solve that problem, Liu Fu cites a somewhat cryptic passage in *Huai-nan Tzŭ* (78, III 2) which would call for too long a commentary if it were to be explored fully. Here Liu's deductions must suffice. The most primitive sun-dial was a square of cloth or oxhide which, when in use, was stretched flat and placed in the equatorial plane. The stretching was done by pulling at the corners of the square and at the middles of its sides: in other words, at eight equidistant points. Hooks were the means by which this tension was exerted at the corners, and presumably they were fixed to some sort of rigid frame. Perhaps the **V**s engraved on the stone dials represent a memory of these hooks, and the **L**s represent gadgets for securing the sides; but Liu expressly disclaims finality for the surmise (*v.* 80, 591-594, figs. 4, 5).

An outcome of this lengthy dissertation is, I make bold to say, that the proposed term "sun-dial mirror" should be preferred to the customary "**T L V** mirror." The latter merely describes a superficial resemblance without a hint of the real significance. It was justified only so long as the derivation of these forms remained unrecognized. The term "sun-dial mirror" should not be taken to imply that any of these mirrors ever functioned as a sun-dial. Had there been means for the seating of a gnomon, a mirror such as No. 28 might have been used as a sun-dial, provided that it was orientated aright and tilted to suit the latitude and season. But the

central boss of no mirror that I have seen would facilitate the erection of a gnomon. Apart from questions of practical utility, the presence of forms shaped like the letters **T**, **L** and **V**, which we now know were characteristic markings on ancient sun-dials, is thoroughly in keeping with the rest of the design on No. 28. In fact, the forms may be regarded as an integral part of the cosmic symbolism. The Chinese base their astronomy on an equatorial system, and their sun-dials are but an application of that system. It may, indeed, have been one of the earliest instruments devised for satisfying social needs through observation of the heavens, and thus the invention was a primary step towards civilization. At first, star lore though of the simplest served to regulate the activities of herdsmen; at a later stage cultivators of the soil watched as well the sun's shadow throughout the seasons in order to time the sowing and gathering of their crops. A calendar became necessary to the orderly routine of settled urban life, and naturally it was a fundamental responsibility of the ruler. The making of star maps, the determination of the four crucial days of the equinoxes and solstices, the marking of the hourly march of time—all intimately correlated—are only some of the main implications conveyed by this mirror's design. No. 28 is, in short, a compendium of cosmology, and, as may be gathered from the inscription, it is a compendium of astrology as well. I have classified it as "a sun-dial and cosmic mirror" in order to differentiate it from those types which lack such comprehensiveness. Some, for instance, bear little more than the characteristic sun-dial markings, and some have only certain starry symbols. Incompleteness hardly detracts from their talismanic potency; for all are mere variants of the magic compendium embodied in No. 28.

NUMBER TWENTY-NINE A "seven animals" mirror Later Han Diameter, 5½ inches (14 cm.) Plate XXXII

SURROUNDING the seat of the central perforated boss for the cord is a zone containing nine conical bosses or spikes alternating with trifid forms in relief. Outside this are two narrow zones: one plain and raised, the other with oblique lines in relief. Between the latter zone and another like it there lies the main zone which contains seven animals in linear relief alternating with conical bosses, each boss being seated upon a circle with eight cusps. On the thickened rim, between an inner saw-tooth pattern and an outer plain border, are four figures in flat relief.

This is an example of a numerous type which varies as to minor details, the constant features being the seven figures alternating with conical bosses and the nine smaller bosses around the centre. Only the number, not the species, of the figures can be said to be constant. Four of them almost invariably are the Green Dragon, Scarlet Bird, White Tiger and Sombre Warrior (tortoise and serpent) whose symbolic import has been treated fully (*v. sup.* pp. 135-148). The other three often vary. Here they are quail, unicorn and frog, all paralleled among the crowded figures on mirrors like No. 28. Sometimes the place of one is taken by an unrecognizable figure, and sometimes the substitute clearly belongs to that gnome-like race of beings, called *hsien*, who people the Taoist Otherworld. The four attenuate figures in flat relief in the outermost zone are much stylized animal forms. On some mirrors the variants of this part of the design are clearly recognizable as the Four Animals, symbols of the celestial quadrants. An inscription may be present, and then it is placed either inside or outside the broad figured zone. In naming this type, Chinese cataloguers often follow the lead given in the *Po ku t'u lu* (118, XXVIII 20), where it is called after the *ssŭ ling san jui* 四靈三瑞, the Four Supernatural and Three Auspicious (Animals). Several illustrated catalogues contain mirrors that resemble No. 29 fairly closely (*v.* 5, XIX 17, 39; 10, XV 55, 56; 30, Metal Section, 361, 399; 52, Nos. 4, 6; 82, XXIII 34).

NUMBER THIRTY A " beasts and grapes " mirror
T'ang Diameter, 5¾ inches (14·6 cm.) Plate XXXIII

WHEN the compilers of the Sung imperial catalogue gave the name " horses of the sea and grapes " (*hai ma p'u-t'ao* 海馬葡萄) to the design on mirrors like this one, they set a fashion which still prevails, the only variation being that sometimes " animals " (*shou* 獸) is substituted for " horses." Presumably the word " sea " is used to mean " foreign " in the sense " beyond the seas " (*hai wai* 海外), implying the traditional fiction that China, mainland of the world, is surrounded by the Four Seas (*v.* 74, III 41). On some of the numerous and diverse mirrors of this type there are unmistakable horses, with or without wings ; and perhaps that partly explains the name. On most, as on No. 30, the creature obviously is not a horse. With curly mane and long tail ending in a tuft, it is a passable imitation of a lion as represented in certain designs of foreign origin which I shall discuss presently. Another form that occurs, but not often, is a horned beast with lion-like proportions, the fabulous *suan i* 狻猊. Sometimes there is doubt as to the identity of the beast, and wolf, ibex, panther or weasel have been guessed. On a few mirrors there are easily recognizable foxes, and perhaps a factor in any combination of foxes and grapes was the widespread currency of Æsop's *Fables*. Compared with the lions represented at second hand, the foxes of course appear more true to life in a country where they are indigenous and the lion is not. Here within the outer zone are birds, butterflies and dragonflies, and the foliage differs from the true vine-leaf represented in the central field, though the grapes are the same.

A plausible explanation why the Sung cataloguers singled out the horse from among the animals on these mirrors, and also gave a Han attribution is that they had in mind certain popular tales, part history and part romance, about the great pioneer of exploration who brought China into contact with the Western world towards the end of the second century B.C. Chang Ch'ien 張騫, this culture-hero of foreign intercourse, was reputed to have carried back with him seeds of the grape-vine, and the introduction of the superior breed of Ferghāna horses was, too, an outcome of his travels. The story is told at length in chapter CXXIII of the *Shih chi* (*v.* 42 and 129).

The foregoing estimate of the Sung writers' line of reasoning accords with that taken by the brothers Fêng in a note on a mirror much like No. 30. They say : " Concerning the so-called ' horses of the sea and grapes mirror,' the *Po ku t'u* does not explain the meaning of the term. Perhaps it originated from the supernatural breed of horses (*t'ien ma* 天馬) which came from the far west, and from the grape-vine obtained by Chang Ch'ien, while on his mission to the Western Regions, and brought back by him ? " (30, Metal Section, 396). But this is only surmise, and Laufer is hardly justified in asserting that " the attribution ' Han ' simply rests on the puerile assumption made in the *Po ku t'u lu* that, because Chang Ch'ien introduced the grape, the artistic designs of grapes must also have come along with the same movement " (73, 226). An allusion to the same complex appears in the catalogue of the Manchu imperial collection, as follows : " When the Han Emperor Wu gained contact with the Western Regions, he got the grape-vine which he planted in the Shang-lin Park 上林苑 in order to impress foreign countries. Consequently many Han mirrors were made with this design, and surely were cast in the Shang-fang [workshops] " (77, XL 1). As already stated (p. 119), a function of the Shang-fang, which lasted many centuries, was to manufacture things for imperial use. Among remains inscribed with this name as their place of origin the mirrors are by far the most numerous, but they do not include a single " beasts and grapes " example. Indeed, few of this type are inscribed at all, and those that are, display a style of script later than the Han.

Hirth was misled by the traditional Han attribution to regard the " beasts and grapes " type as the earliest of Chinese mirrors (43, 29) ; and later, when he wrote his monograph on the mirrors, he still believed in the Chang Ch'ien complex, at the same time distinguishing certain examples as T'ang imitations (41, 28-31). Archæologists and art historians have cited his views as a definitive contribution to their criteria when discussing other subjects, and some confusion has resulted therefrom. The fallacy still survives, and the Han attribution has not yet been removed from the labels in certain of our museums.

Ch'ien Tien, writing at the end of the eighteenth century, is credited with having been the first to raise a doubt, though the passage is far from explicit on that point. It runs thus : " Nowadays the mirrors with sea animals and grapes (*p'u-t'ao* 葡桃) are identified as Ch'in mirrors, while

those with dragons and phœnixes, birds and flowers, melons and pumpkins, water-chestnuts and mallows, etc., are identified as T'ang mirrors. Han mirrors must be recognized on the evidence of the inscriptions they bear. Such methods of estimation accord with books like the *Hsüan-ho po ku [t'u lu]*, but the views expressed may be sometimes right and sometimes wrong " (24, preface, 2). His remark about Ch'in mirrors seems odd. No mirror is so described in the *Po ku t'u lu* or in the *K'ao ku t'u* and its supplement. We are led to infer that the vogue for a Ch'in attribution may have started much earlier than is generally imagined (*cf. sup.* p. 85). At all events, the fallacious Chang Ch'ien complex appears not to have been known to Ch'ien Tien, nor is it clear that he did recognize that the dating of the motif and the style was several centuries too early. On the contrary, his assignment to the Han of one mirror in his treatise shows a similar lack of stylistic discrimination (*v.* 24, 2).

It was left to several Japanese archæologists to point out the real period of the " beasts and grapes " mirrors. Miyake, Takahashi and Tomioka ascribed them to the T'ang, and the remarks of the last-named deserve special attention (108, 36-38, 269, 270). More recently Harada in the *Shigaku-zasshi* 史學雜誌 (XXVIII, No. 1) and Hamada in the *Kokka* (No. 356) demonstrated that the type first appeared towards the end of the Six Dynasties and reached its best under the T'ang. The latter writer pointed out analogies with a pillar in the Lateran Museum and the facade of the Mshatta Palace, a large part of which is now in the State Museum, Berlin.

The evolution of grape-vine designs is treated at length in a fine monograph on the Palace by Schulz and Strzygowski (94). The latter remarks that the motif, though used in Hellenistic art, was not a Greek conception. Probably it originated in Mesopotamia, and the Greeks learnt it through Alexander's campaigns. An early example of the simple undulating vine scroll is the famous marble sarcophagus, found at Sidon and called Alexander's because his figure is carved on it. Vine foliage and grapes, including birds and beasts, in the manner of the mirrors, first appear ornamenting the aforesaid carved pillar, in the Lateran Museum, which has been dated third or fourth century A.D., though Strzygowski traces it to the influence of Syrian art introduced into Rome in Trajan's time (94, 297, 298 ; fig. 76). The two pillars at Acre, which have the vine design without animals, are

certainly of Syrian origin ; and a likely date is between A.D. 525 and 625 (94, 303, figs. 47, 78, 79). An analogy which may be contemporary with the mirrors is the decoration on the ivory throne in the Ravenna Cathedral, and it is closer since it includes both birds and beasts. Probably it was made about the middle of the sixth century (94, fig. 77 ; for a better picture, *v.* 14, pl. 4). But here the design is confined to the undulating vine scroll, suited to narrow bands, while the Mshatta façade has broader fields covered with a vine medley in which animal elements are involved (*v.* Fig. 44).

The ruined Mshatta Palace lies on the edge of the Syrian desert, nearly

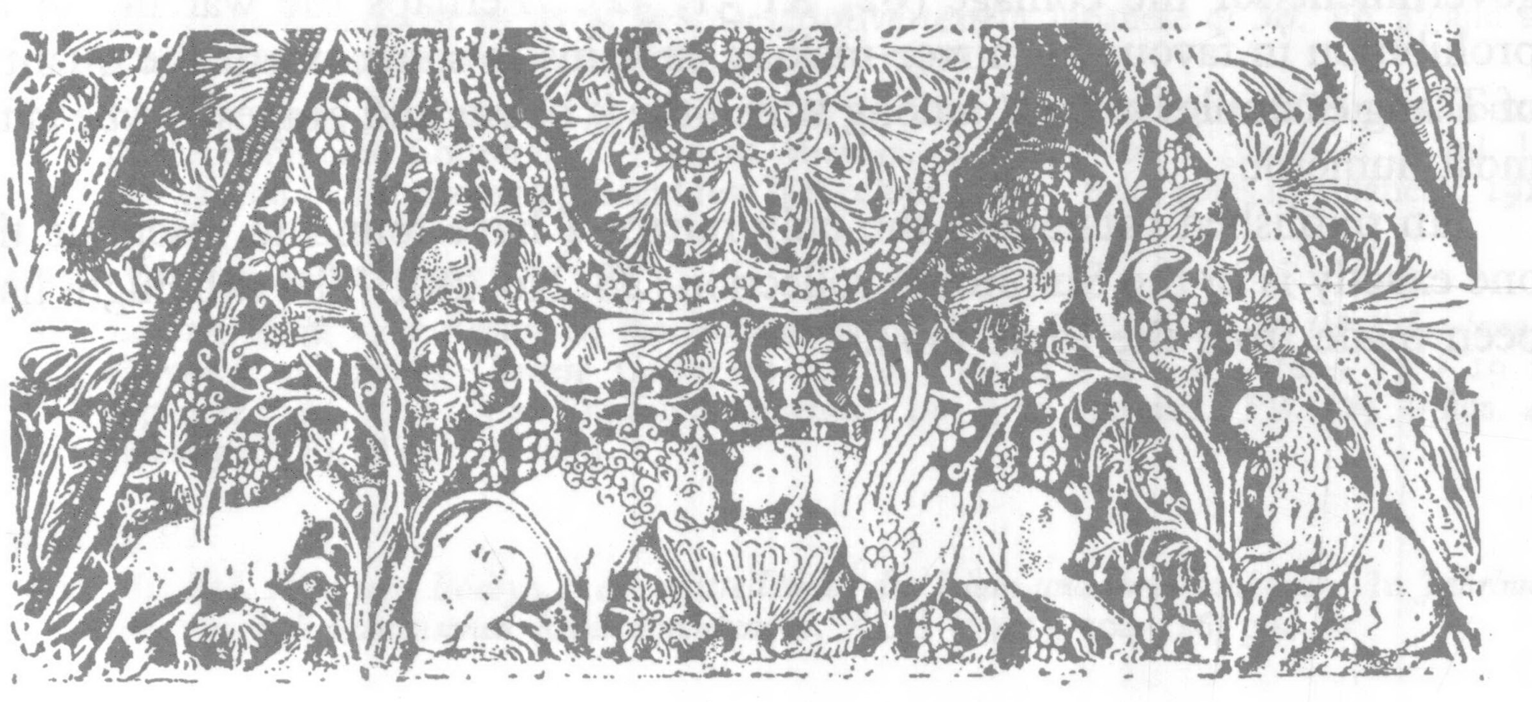


FIG. 44 Drawing from photograph of part of Mshatta Palace façade

50 miles east of Jerusalem, and appears to have been abandoned before the builders had finished. It has been dated variously between the fourth century and the eighth ; but there seems to be some evidence that it was built for Walid II (40, 106). The fact that he was murdered the year after he became caliph in A.D. 743 perhaps accounts for the work having stopped. No inscription has been found on the structure, and the architecture displays a diversity which doubtless resulted from the prevailing custom of recruiting competent artisans from anywhere, regardless of race and experience. They must have carried out their instructions each in accordance with the practice of his respective school. Though the locality of the site does not, therefore, necessarily fix the provenance of the design, an Iranian origin

for the "beasts and grapes" motif is probable. Among the examples from this source may be noted a silver vase, in the British Museum, which is said to have been found in the Persian province of Mazandaran, south of the Caspian (99, pl. 52). It displays an embossed design of two vines, and scattered between the branches are six birds and two foxes, the latter stealing the grapes. Two naked boys, gathering bunches, are added. Sassanian of the sixth or seventh century is the accepted attribution. There is also an engraved silver plate, now in the Hermitage, which came from the government of Viatka, and it offers a closer analogy with our mirrors, except for the presence in the centre of a nude woman feeding a stag (99, pl. 66).

The name for the grape, *p'u-t'ao*, is evidently a foreign one. The Chinese have used various characters to write it phonetically: two different versions have been quoted above. Laufer sketches the history of grape-wine in China, from which it appears that the art of making it was not learnt before the middle of the seventh century, and then the wine was fermented. Distillation probably dates from the Yüan period. There are in China several indigenous species of wild vine which bear no relation to the cultivated kind imported from abroad (*v.* 73, 225-243).

While the lion is not indigenous to China, as has been remarked above, actual lions were known to the Chinese certainly as early as the Later Han period. Some were sent as presents to the Chinese Court in A.D. 87, when the king of the Yüeh-chih, or Indo-Scythians, asked for a Chinese princess in marriage. Other lions came from Central Asia as tribute to succeeding Han emperors (*v.* 72, 236-245). Two stone lions, sculptured in the round, guard the entrance to the tomb precincts of the Wu family in Shan-tung, where the famous bas-reliefs are preserved. The name of the artisan, who made them at the cost of 40,000 "cash," is recorded in an inscription of A.D. 147 on one of the pillars; but the lions themselves had become lost to view, buried in the ground, until they were excavated some thirty years ago. Sekino reported the find in the *Kokka* (No. 227). Though not impressive, they look as much like real lions as do many works of the same kind by our monumental masons. Again, there is the lion which occurs frequently in Buddhist sculpture of the Wei periods; but it had acquired certain distinctive traits not to be found on the mirrors.

Let us recapitulate the steps in the foregoing discussion concerning

the problem of dating these mirrors. Without stating their reasons, the compilers of the Sung classic on bronzes labelled them Han, and this has been the accepted attribution until recent years. Even Laufer, in his able monograph on Han design, subscribed to it (72, 241, 242), though he changed his mind later (73, 226). Among Western writers, Hirth was the chief supporter of the notion, having been influenced by late Chinese theories implicating Chang Ch'ien and the free intercourse with the central and western parts of the Euro-Asiatic continent following close upon the great explorer's travels. One should add here that Hirth dragged in an hypothesis that the mirrors manifested the grape sacred to Dionysius, and, besides, a series of animal attributes of this god, particularly the lion (43, 26-28). Several Japanese archæologists then advanced the opinion that the "beasts and grapes" mirrors first appeared about the sixth century, a close analogy being the Mshatta facade. We have examined other evidence from the Near East and the Mediterranean.

The conclusion is that the Japanese archæologists are right. It is undoubtedly true that the Chinese under the Han had before their eyes the cultivated vine, grown in the royal gardens, and occasionally lions sent as tribute, and that they might have invented spontaneously a design combining these elements. But they seem not to have done so; for no such motif has been found associated with proved Han remains. On the other hand, a design like that on the mirrors under discussion flourished in the West. Presumably the Chinese adopted it ready-made from abroad about the sixth century when Persian influence became apparent in many Chinese arts. Moreover, apart from the actual motifs, the style these mirrors display does not accord with Han practice. It is, on the other hand, in keeping with certain dated products of the T'ang. Many examples might be cited, but one must suffice—a mirror which in style and minor detail resembles a large number of the "beasts and grapes" type, though its design is the Ssŭ Shên, previously described (p. 135). At equidistant positions on the rim are the four characters *Yung-hui yüan nien* 永徽元年, a date corresponding to A.D. 650, apparently cast in relief, and therefore not a later addition. The mirror belongs to Ch'ên Pao-ch'ên 陳寶琛, and is included in the catalogue of his collection (*Ch'êng-ch'iu kuan chi chin t'u* 澂秋館吉金圖, *f.* 70). In the same work (*f.* 72) there is an inked-squeeze taken from one of those rare instances of a mirror with the "beasts and grapes"

motif bearing an inscription. The script is characteristic of T'ang mirrors, and the text differs but slightly from that of the inscription on an undoubted T'ang mirror which is catalogued as such by the authors of the *Po ku t'u lu* (118, XXVIII 40).

It is interesting to note that during a period of copper scarcity under the T'ang, mirrors were the only objects which the public was allowed to cast in bronze. An edict of A.D. 793 forbade the sale of bronze weapons and vessels, and gave permission for anyone to mine copper wherever it might be found throughout the empire, but the metal was requisitioned by the government for the coinage (62, XI 31, 32). Perhaps the waiving of the prohibition in favour of mirror-making explains to some extent the quantity of T'ang examples known, among which the "beasts and grapes" type is the most numerous.

In published catalogues the only mirror I have found to resemble this one exactly is in the Sumitomo collection (38, No. 48). The two might have been made from the same mould.

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ANONYMOUS

1 *Chou li* 周禮 Administrative and ritual code, perhaps compiled in fourth century B.C. Commentaries by Chêng Hsüan 鄭玄 (127–200) and Chia Kung-yen 賈公彥, seventh century 42 *c.* JY

2 *Chou pi suan ching* 周髀算經 On astronomy; probably third century B.C. to second century A.D. Commentaries by Chao Chün-ch'ing 趙君卿, probably Later Han, Chên Luan 甄鸞 sixth century, and Li Hsün-fêng 李淳風 (602–670). 2 *c.* PHL of a Ming edition. In *Ssŭ pu ts'ung k'an* 四部叢刊 series. Shanghai: ND

3 *Êrh ya* 爾雅 Terms used in ancient writings, arranged under 19 categories. Probably third century B.C. Commentaries by Kuo P'o 郭璞 (276–324) and Hsing Ping 邢昺 (932–1010). 10 *c.* JY

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6 *Hsü k'ao ku t'u* 續考古圖 Illustrated catalogue of bronze, jade and pottery objects. 5 *c.* Followed by *K'ao ku t'u shih wên* 考古圖釋文, ff. 29. WB, from MS. copy at third hand of printed Sung edition, included in the miscellany *Shih wan chüan lou ts'ung shu* 十萬卷樓叢書, 1892

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9 *Li chi* 禮記 Ancient ritual texts, probably assembled under the Former Han. Commentaries by Chêng Hsüan and K'ung Ying-ta. 63 *c.* JY

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KU YEN-WU and HUANG JU-CH'ÊNG 顧 炎 武 黃 汝 成

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111 *T'ao-chai ts'ang shih chi* 陶齋藏石記 Descriptive catalogue of inscribed stone and pottery objects in the author's collection. Notes by various writers. 44 *c.* Followed by 2 *c.* on inscribed bricks, entitled *T'ao-chai ts'ang chuan chi* 陶齋藏甎記 PHL 1909

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PLATES

II



NO. 2 *TING*, inscribed Actual size

I



NO. 1 *TING* H. 10⅝ inches (27 cm.)

IV



SECOND VIEW OF NO. 3 H. (to top of handle) 11⅝ inches (29.5 cm.)

III



NO. 3 *YU*, inscribed H. 10⅜ inches (26.4 cm.)



VI

COVER OF NO. 3 Actual size



V

THIRD VIEW OF NO. 3



VIII

NO. 5 *KU* H. 11¾ inches (29.8 cm.)



VII

NO. 4 *YU*, inscribed H. (to top of handle) 9¼ inches (23.5 cm.)

X



NO. 7 *CHIH* H. $5\frac{3}{4}$ inches (14.6 cm.)

IX



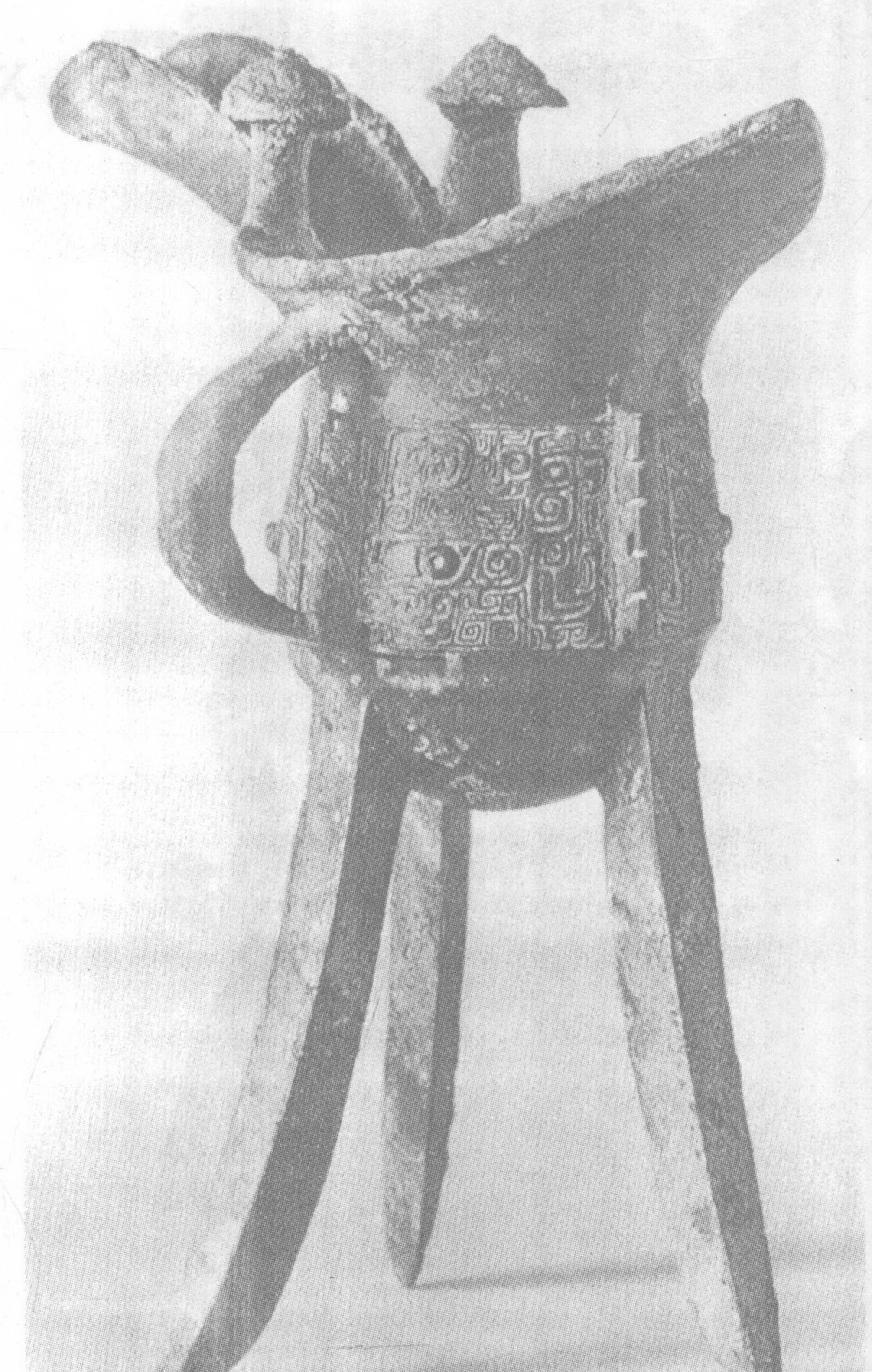
NO. 6 *KU* H. $11\frac{5}{8}$ inches (29.5 cm.)

XII



SECOND VIEW OF NO. 8

XI



NO. 8 *CHÜEH*, inscribed H. 8 inches (20.3 cm.)

XIV



NO. 10 *I*, inscribed H. 7¼ inches (18.4 cm.)

XIII



NO. 9 *KUANG*, inscribed Actual size

XVI



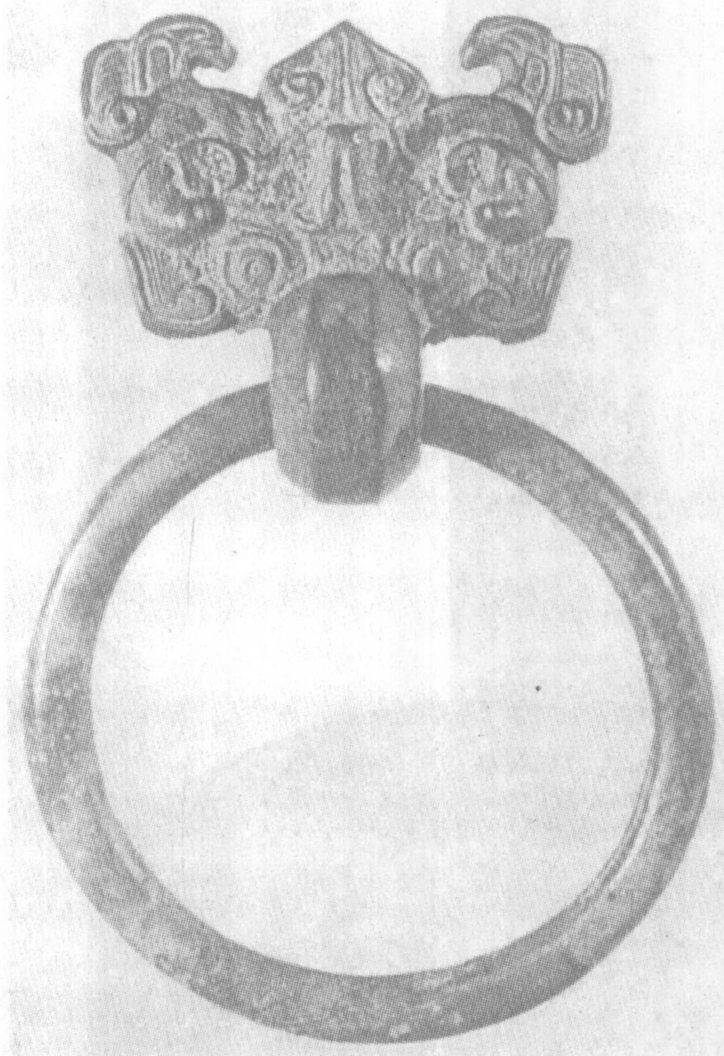
NO. 12 *HU*, inscribed One of a pair H. 19 inches (48.3 cm.)

XV



NO. 11 *KUEI* H. 8⅜ inches (21.3 cm.)

XVIII



NO. 13 PLAQUE WITH RING
Actual size

XVII



DETAILS OF NO. 12

XX

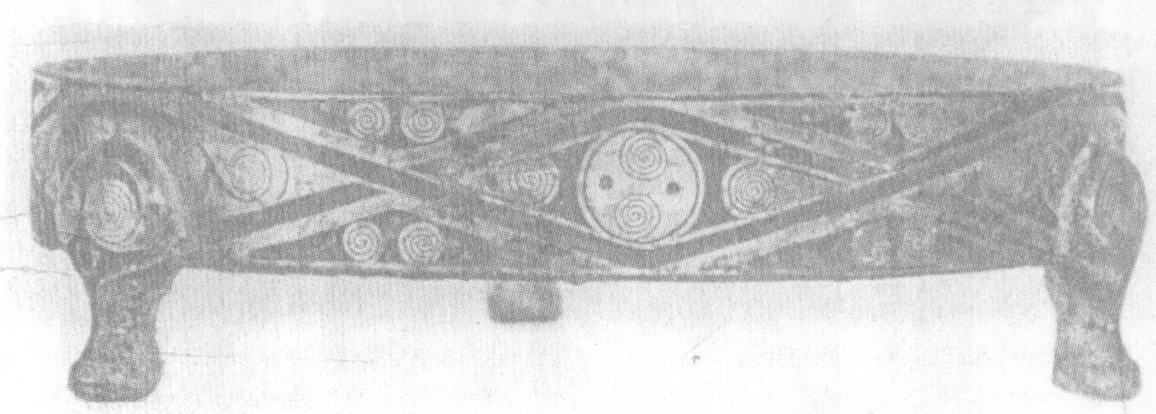


NO. 16 *TO* H. 7½ inches (19.1 cm.)

XIX



a



b

a TWO VIEWS OF NO. 14 AXLE-CAP WITH PIN Actual size *b* NO. 15 PART OF A *LIEN* D. 4½ inches (11.4 cm.)

XXI



DETAIL OF NO. 16

XXII

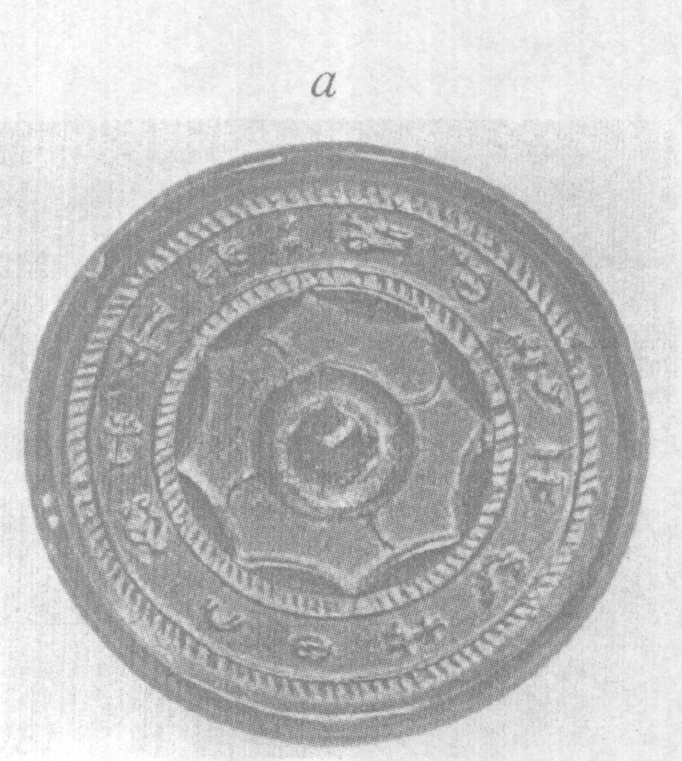


NO. 17 *HO* H. (to top of handle) 8⅛ inches (20.6 cm.)

XXIII



a



b

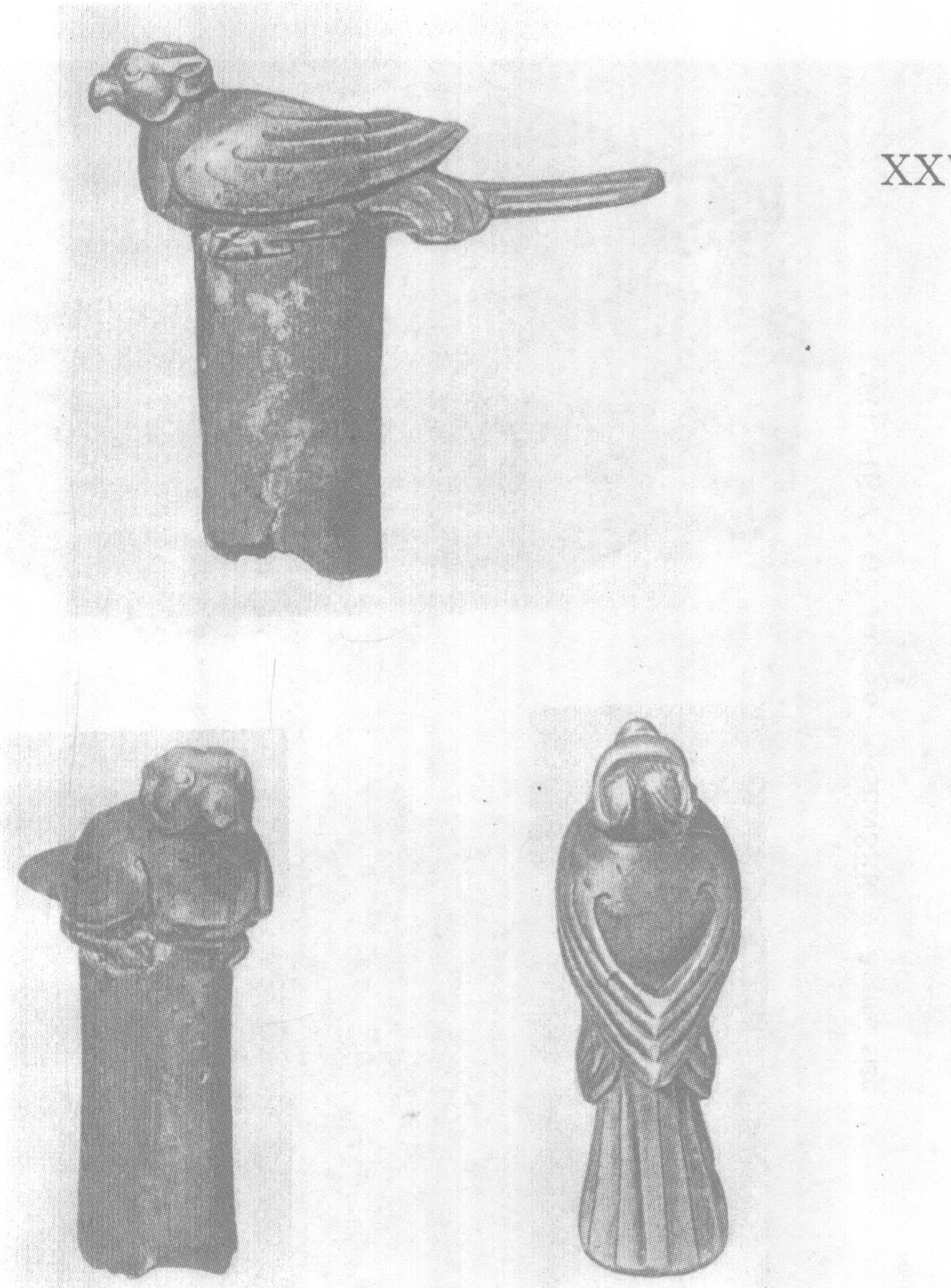
a NO. 18 MIRROR Actual size
b NO. 19 MIRROR, inscribed Actual size

XXIV



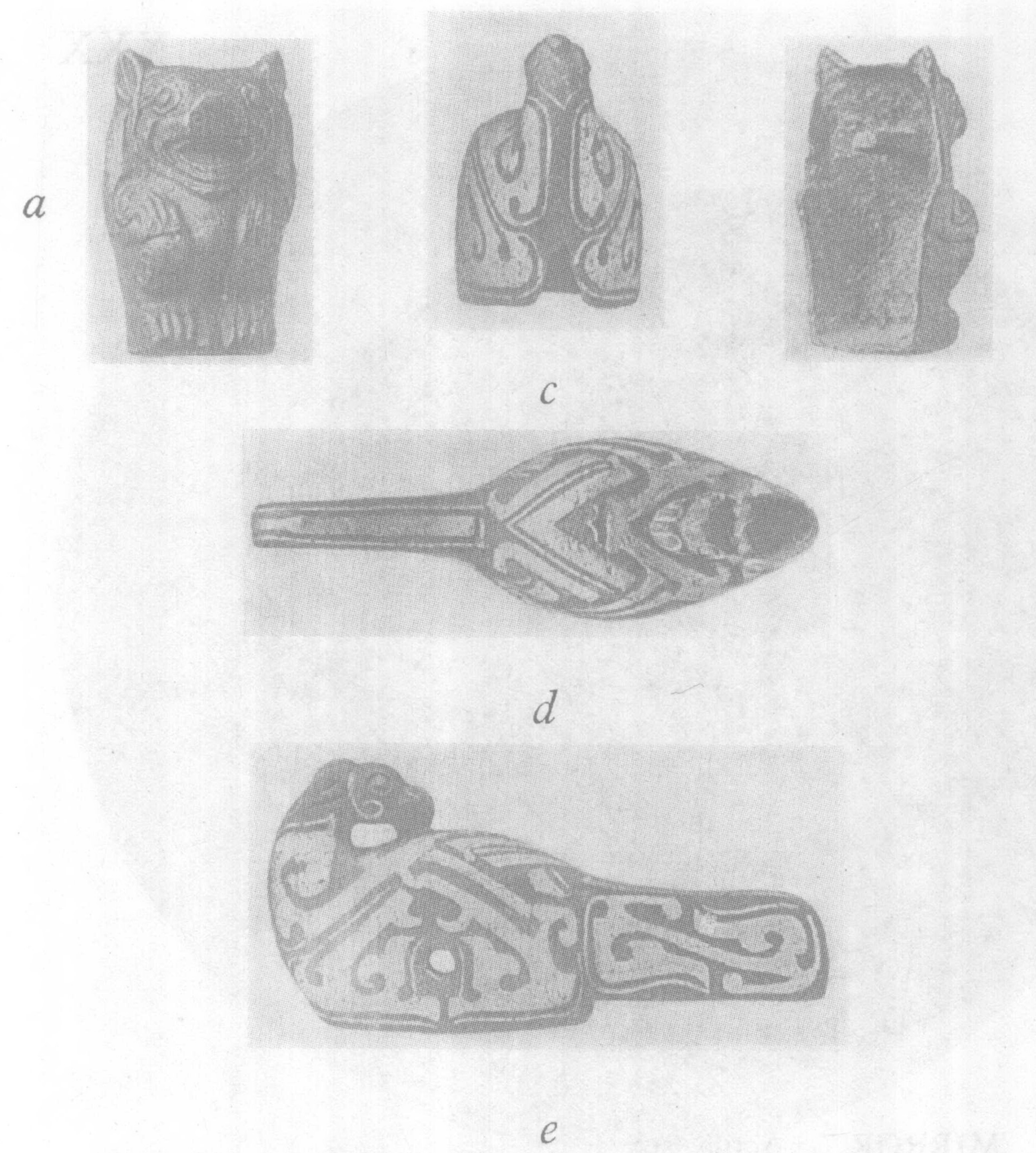
NO. 20 MIRROR D. 7¼ inches (18.4 cm.)

XXVI



THREE VIEWS OF NO. 23 ORNAMENT FOR *KO* HAFT Actual size

XXV



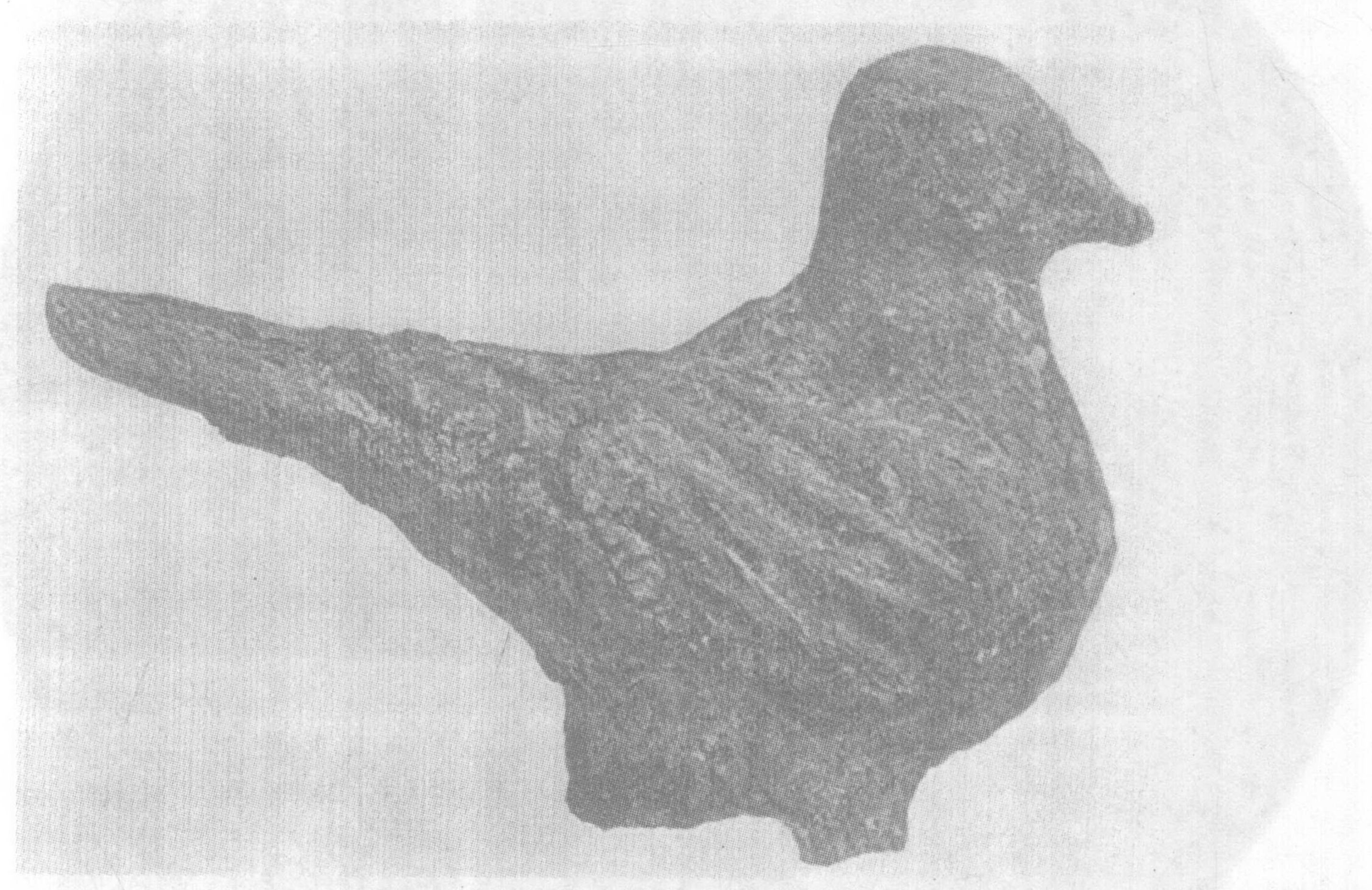
a & *b* TWO VIEWS OF NO. 21 SUPPORT FOR UNKNOWN OBJECT Actual size *c-e* THREE VIEWS OF NO. 22 ORNAMENT FOR *KO* HAFT Actual size

XXVIII



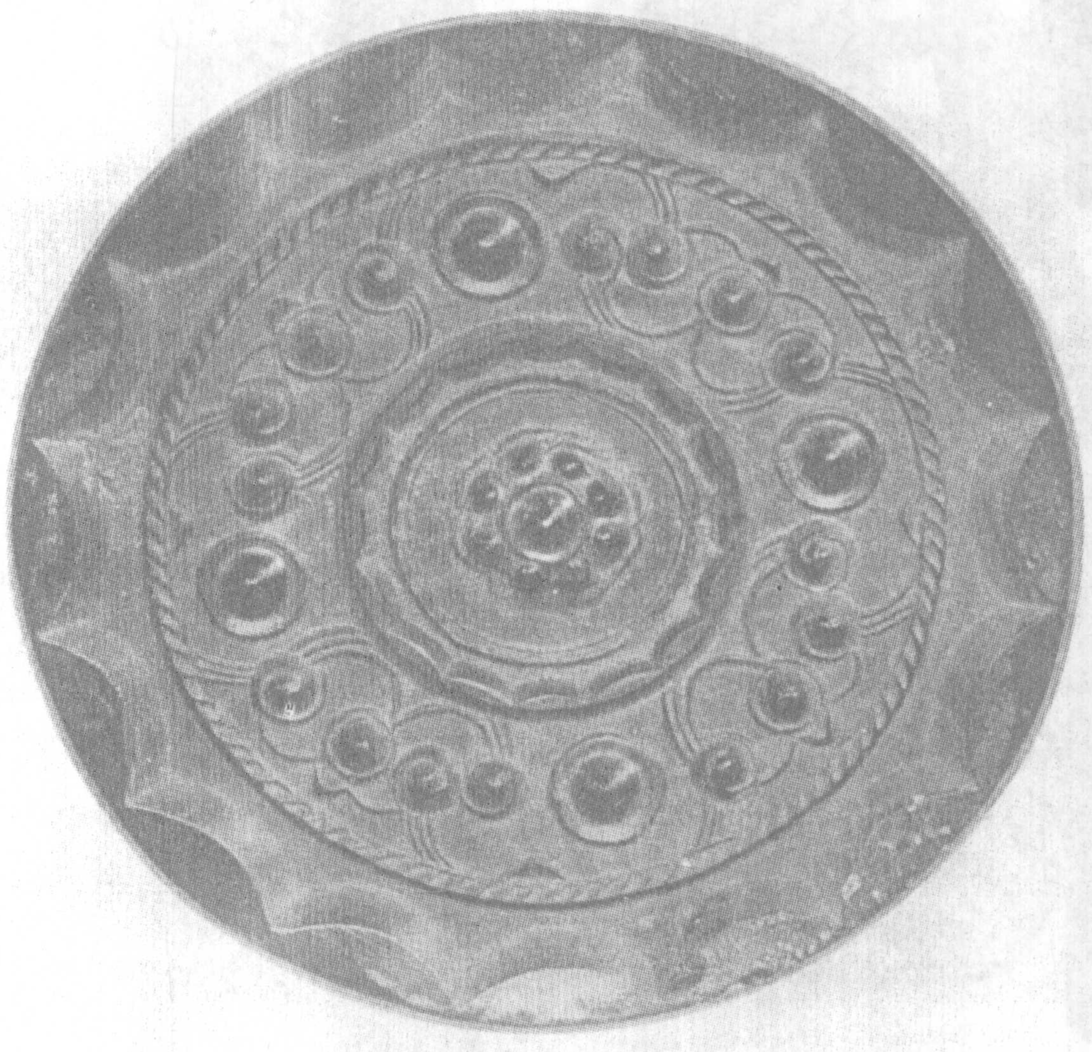
NO. 25 CENSER H. 6⅞ inches (17.5 cm.)

XXVII



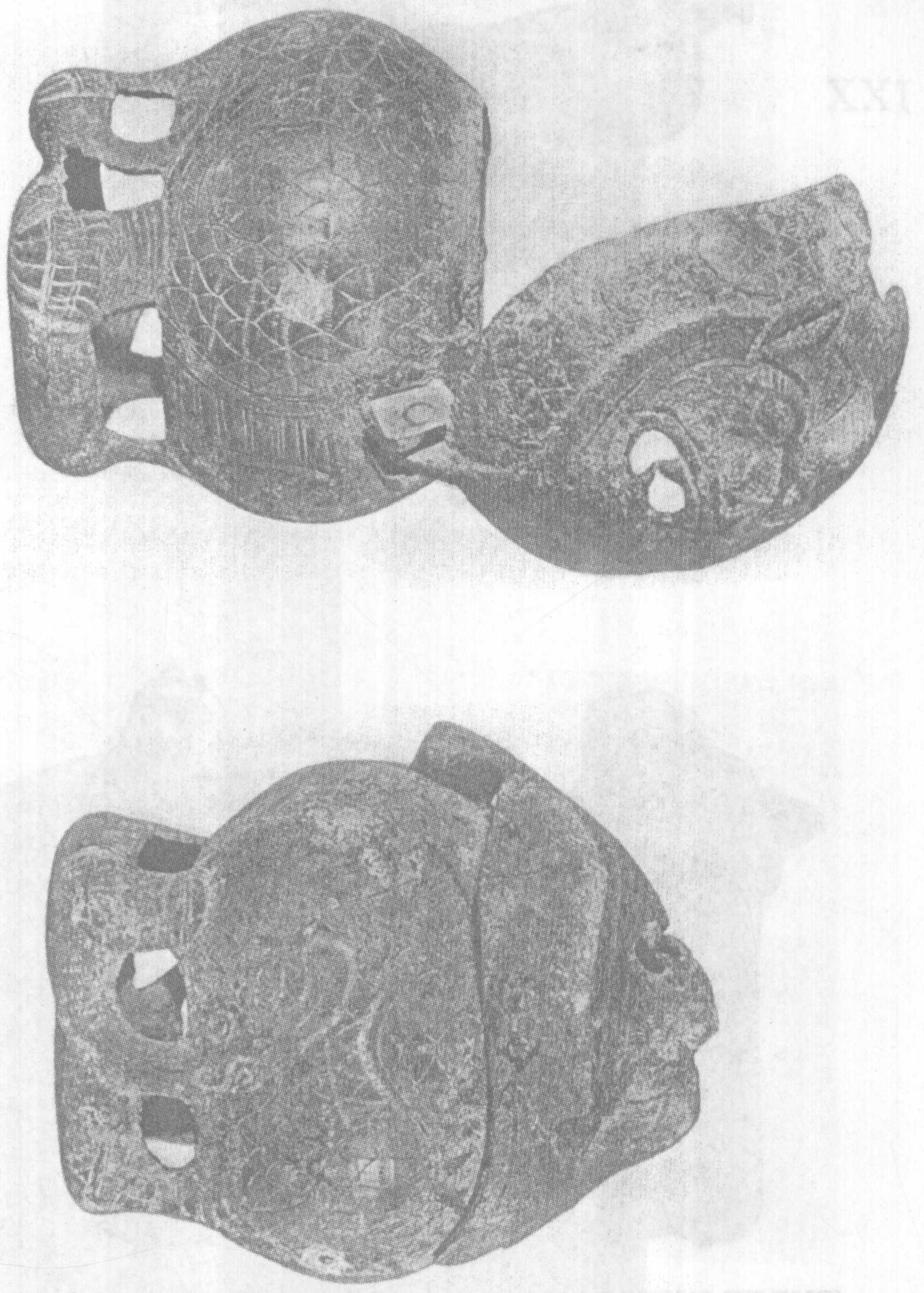
NO. 24 PIGEON-STAFF HEAD Actual size

XXX



NO. 27 MIRROR Actual size

XXIX



TWO VIEWS OF NO. 26 CENSER Actual size

XXXII



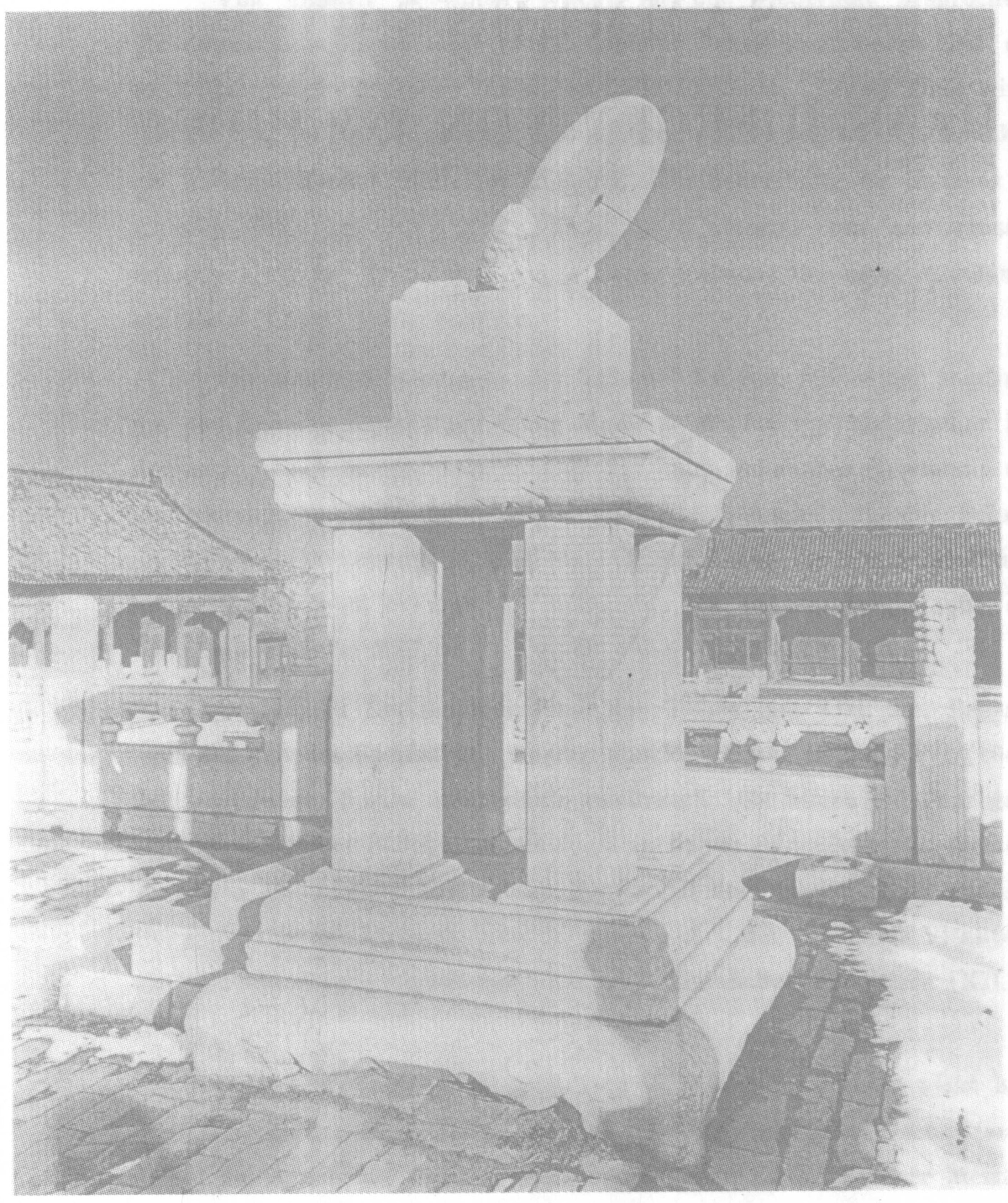
NO. 29 MIRROR Actual size

XXXI



NO. 28 MIRROR, inscribed D. 8¼ inches (21 cm.)

XXXIV



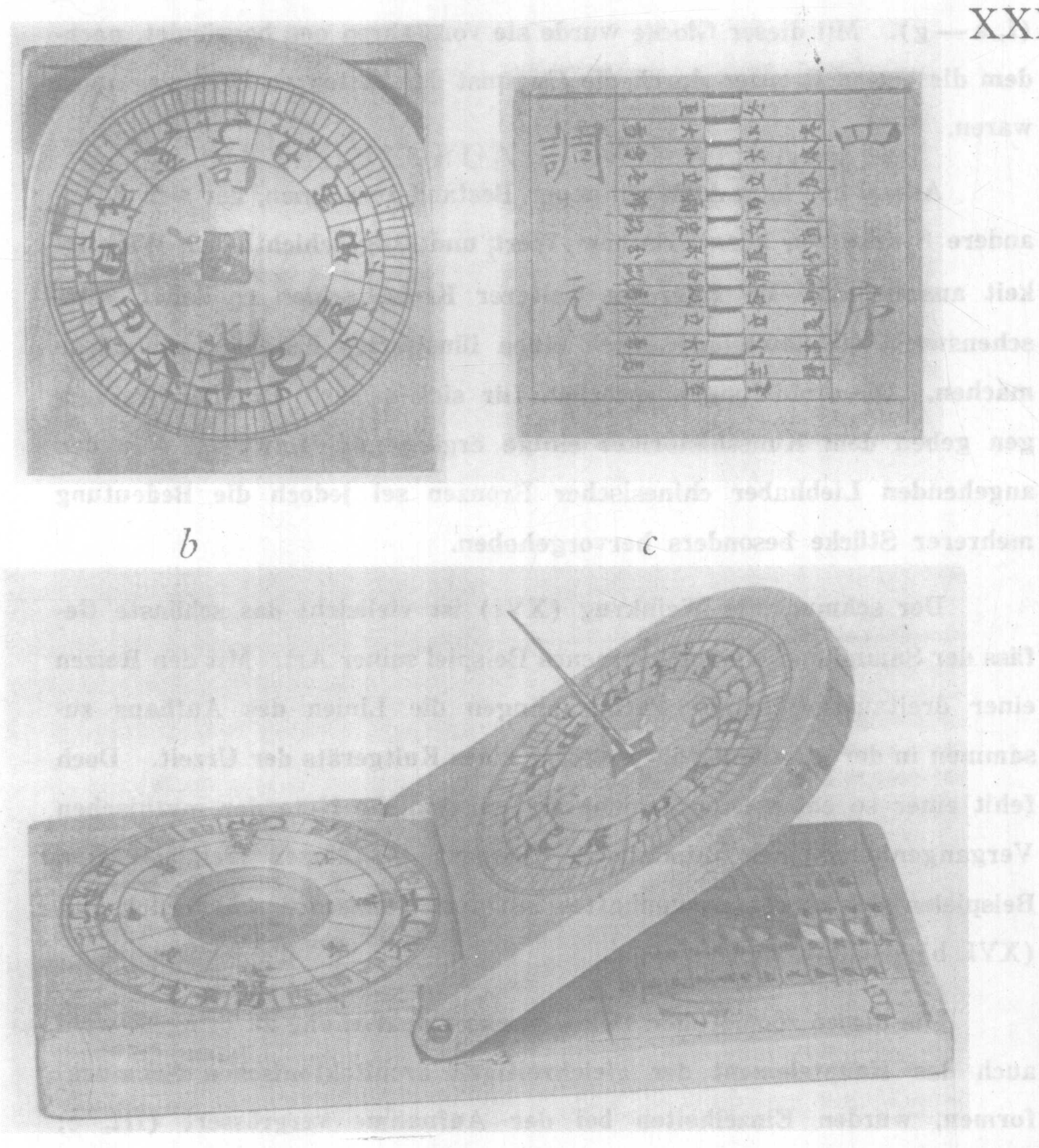
SUNDIAL IN FRONT OF THE T'AI-HO TIEN, PEKING

XXXIII



NO. 30 MIRROR D. 5¾ inches (14.6 cm.)

XXXV



b c

a

WOODEN SUNDIAL, WITH MAGNETIC COMPASS
a General view *b* Sundial *c* Scale of seasons Actual size In the Science Museum, London

SAMMLUNG LOCHOW

CHINESISCHE BRONZEN

I

HERAUSGEGEBEN

VON

GUSTAV ECKE

PEKING
1943

SAMMLUNG
HANS JUERGEN VON LOCHOW

VORWORT

Nao Chai, der chinesische Name der Sammlung Hans Juergen v. Lochow, wurde im Gedanken an die Standglocke der ersten Tafeln gewählt. Sie ist das archäologische Hauptstück der ganzen Sammlung (I, a — g). Mit dieser Glocke wurde sie vor Jahren neu begründet, nachdem die ersten Bronzen durch die Ungunst der Zeiten verloren gegangen waren.

Allmählich kam dann ein neuer Bestand zusammen, der sich durch andere Stücke von künstlerischem Wert und stilgeschichtlicher Wichtigkeit auszeichnet. Im Interesse weiterer Kreise schien es daher wünschenswert, die Sammlung durch einen illustierten Katalog bekannt zu machen. Die Abbildungen sprechen für sich selber. Die Beschreibungen geben dem Kunsthistoriker einige ergänzende Hinweise. Für den angehenden Liebhaber chinesischer Bronzen sei jedoch die Bedeutung mehrerer Stücke besonders hervorgehoben.

Der schmucklose Weinkrug (XVI) ist vielleicht das schönste Gefäss der Sammlung, ein vollkommenes Beispiel seiner Art. Mit den Reizen einer dreitausendjährigen Patina klingen die Linien des Aufbaus zusammen in der geheimnisvollen Grösse eines Kultgeräts der Urzeit. Doch fehlt einer so edlen Bronze nicht die unheimliche Note der mythischen Vergangenheit, jenes animistische Element, bei dessen freiplastischen Beispielen sich so oft Maskenhaftes mit dem Komischen schauerlich eint (XVI, b).

Um diesen zoomorphen Dekor besser zur Wirkung zu bringen, wohl auch das Hauptelement der gleichzeitigen architektonischen Schmuckformen, wurden Einzelheiten bei der Aufnahme vergrössert (III, c; VII, b; XI, b; XVI, b; XIX, c). Sie veranschaulichen die uralte Verwandtschaft des Dämonischen mit dem Abstrakten, jene geisterhaft erstarrte Formenwelt, die den magisch gebundenen Menschen beherrscht, indem sie ihn an die unsichtbaren Mächte drohend erinnert.

Auf den Wandungen der Glocke ist die Abstraktion der Maske bis zum Letzten durchgeführt (I, g). Ob es sich dabei um eine Steigerung handelt oder um ein Abklingen, das bleibt einstweilen noch unentschieden. Man wird auch hier nur vermuten dürfen. Jedenfalls ist die beim Gusse

鐃齋吉金錄

艾克博士雅屬

北平孫壯題

dieser Glocke erwiesene Meisterschaft nicht mehr zu überbieten, die lineare Kraft der Ornamentierung aussergewöhnlich, das sonst nicht nachweisbare Rundstabrelief wuchtig und gross.

Überraschend in diesen Ausmassen ist die erst vor kurzem ausgegrabene Schöpfkelle (XV). Die Bambusform der Laffe wirkt urtümlich, der geometrische Dekor erinnert an die gekerbten Schmuckformen weisser Shang-Töpfereien.

Monumental ist der Aufbau des grossen Dreifusses mit dem Zikadendekor (IV). Auch hier handelt es sich um eines der interessantesten Beispiele der Art. In dieser Sonderform ist der Dreifuss nur noch einmal nachweisbar, in der Sammlung des Kaisers Kienlung; ja, es ist nicht ausgeschlossen, dass es sich überhaupt um dasselbe Stück handelt.

Auch sonst liess sich der Sammler nicht von dem Vorurteil beeinflussen, das nur frisch ausgegrabene Bronzen dulden will. Stücke aus altem, chinesischem Privatbesitz wurden übernommen, wenn sie künstlerisch oder historisch wichtig zu sein schienen. Der oben genannte Weinkrug (XVI) besitzt den reichsten unberührten Edelrost, mattglänzende Türkisfarben auf tiefgrünem Grund, aus dem hellblaue Stellen schimmern. Eine "Handpatina" dagegen, das Ergebnis unaufhörlicher Pflege, verleiht dem Speiseopfergefäss der Tafeln XI, a-d, ein edelsteinartiges Leuchten. Es strahlt in den schönsten Farben, tiefgrün mit hellgrünen und dunkelroten Stellen, in den Glanzlichtern jahrhundertelangen Wachsens und Polierens.

Der vierfüssige Kessel der Tafeln VI, a-e, kommt aus der Sammlung des bekannten Vizekönigs Juan Yüan 阮元, einer der denkwürdigsten Gestalten des frühen XIX. Jahrhunderts. Juan Yüan war ein grosser Herr, noch im Stil der alten Mandju-Zeit, Staatsmann, Mathematiker, Literat und kultivierter Sammler in einer Person, ein Zeitgenosse Talleyrands. So wurde nach der Erstausgabe seines Bronzewerks die Seite mit der Beschreibung des Kessels auf Tafel VI, a, abgebildet. Das Schriftbild ist ein Muster xylographischer Eleganz, der Nachschnitt der Inschrift ein Zeugnis geistvoller Neubelebung. Der erklärende Text ist sachlich und auch heute noch nicht ganz veraltet.

Die Inschrift des Kübels der Tafeln XIV, a-c, wurde von Wu Ta-ch'eng 吳大澂 behandelt und das Stück seitdem mehrfach abgebildet.

Auch Wu war eine Persönlichkeit von Format. Zusammen mit Juan Yüan ist er der Ahn der modernen chinesischen Bronzeforschung. Uns fesselt die metallische Schönheit des Gefässes, seine pralle Form, seine Einfachheit und Grösse.

Von ähnlich bronzener Wucht ist die wiederholt besprochene Kanne mit dem Tigerhenkel (XX), zugleich Zeuge einer neuen Zeit, des so oft fälschlich berufenen Stiles der Ch'in-Dynastie. Dieser Tiger wirkt wie ein Symbol der Herrschaft, man könnte sich zu solchem Gefässe keinen anderen Henkel vorstellen (XX, b). Die Schreibung des Namens im Katalog der Sammlung Tuan Fang 端方 stammt von des grossen Sammlers eigener Hand und wurde daher mitsamt der alten Abbildung auf Tafel XX, d, wiedergegeben.

Das geaichte Kornmass der Tafeln XXI, a-e, mit seiner Inschrift aus der Zeit des Usurpators Wang Mang 王莽, ist von historischer Bedeutung. Auch dieses Stück kommt aus einer bekannten Sammlung des vorigen Jahrhunderts, deren Katalog in des Sammlers eigener Schrift noch heute oft genannt wird. Als Dokument für die Hand des Ch'en Chieh-ch'i 陳介祺 bringen wir auch hier die entsprechende Seite des Katalogs als Tafel XXI, a.

Die beiden Speiseopfergefässe der Tafeln XII/XIII, a-e, Bronzen "aus der Zeit des Konfuzius", wurden von Max Loehr in Band VII (1942) der *Monumenta Serica* ausführlich gewürdigt. Sie bilden ein Paar ganz ausserordentlicher Stücke, wie es sonst in keiner Sammlung des Westens zu finden ist. Loehr hält diesen Sonderfall des "Sockel-Kuei" für den Höhepunkt in der Entwickelung der ganzen Art, die "packende Vitalität", die "barocke Bewegungsenergie" der ungeheuerlichen Fabeltiere (XII, c) für einzigartig.

Herr Sun Po-heng 孫伯恆 liess es sich auch diesmal nicht nehmen, das chinesische Titelblatt zu entwerfen und mit selbstgeschnittenem Siegel zu versehen. Für solche neuen Beweise altchinesischer Meisterschaft noch einmal besonders zu danken, ist eine erfreuliche Pflicht des Sammlers, sowie des Herausgebers

Gustav Ecke.

Universität Fujen
März 1943

BESCHREIBUNG DER BRONZEN

I-XXII

Nao 鐃 (I, a—g)

Anfang Chou. Ältere Ausgrabung. Ganze Höhe 64,5 cm; Durchmesser der Schallöffnung 30,9 × 49,4 cm; Höhe des Schaftes 25,2 cm; Durchmesser des Schaftes 10,4 cm; Wandstärke des Schaftes 0,9 cm; Stärke der Glockenwandung 2 cm; Tiefe des Rundstabreliefs 1,2 cm; Gewicht 82,5 kg.

Glatte, gleichmässig dunkelgrüne Lackpatina.

Glocke (I, a-b) von linsenförmigem Querschnitt (I, e oben), mit glattem, hohlem Schaft (I, e unten) zum Aufsetzen auf einen Standpfosten. Im Ornamentstreifen um die Schallöffnung auf jeder Seite ein mittleres Feld zum Anschlagen mit dem Handklöppel (I, b oben). Oberer Rand der beiden Wandungen leicht konkav (I, b oben).

Die Erscheinung der Glocke, mit der Schallöffnung nach oben auf dem Pfosten stehend, wird beherrscht von den grossen T'aot'ieh-Motiven der beiden Seitenfelder (I, a). Die hier durchgeführte Sonderform der T'aot'ieh-Maske besteht aus einem ausgespannten Gefüge reliefierter Rippen, die sich von einem mit scharfstegigen, spitzig ausgezogenen Spiralen übersponnenen Ornamentgrunde rundstabartig abheben (I, c). Vertieft wiederholt sich das Spiralmuster in den ovalen Augäpfeln (I, c, g), in der Umrahmung (I, g), sowie auf der Unterseite des Bodens (I, d, f). Der Rahmen ist oben verdoppelt. Die Anschlagstelle in der Mitte des Randstreifens ist seitlich schräg abgegrenzt und besitzt ein in sich geschlossenes Motiv gegenständig angeordneter, linear aufgelöster Formen, die zum Teil dem komplexen Ornament des Hauptfeldes wörtlich entnommen sind (I, g). Eine verdoppelte Ringleiste (I, d) betont den Schaftansatz.

Der Typus des grossen Ornaments verdient eine besondere Untersuchung, hier sei die Problemstellung wenigstens angedeutet. Statt der sonst üblichen, aus gegenständigen, drachenhaften Gebilden zusammengesetzten, deutlich erkennbaren T'aot'ieh-Fratze finden wir eine nur als Ganzes lesbare, linear stilisierte, labyrinthartige Maske. Sie wird in ihrer Bedeutung (Abb. 5) erst verständlich durch den Vergleich mit einer noch halb naturalistischen Vorstufe, wie sie Karlbeck an einem Marmor-Dreifuss aus Anyang entziffert hat[1]. Dieses Fabelgeschöpf beschreibt Karlbeck wie folgt (Abb. 3):

"Es ist ein Wesen mit ungeheurem Kopf auf kleinem, hockendem, menschenartigem Körper. Der Kopf ist mit einem Paar langer, ausgebreiteter Geweihe mit mehreren Enden versehen, von denen das äusserste einem Büffelhorn gleicht. Oben auf dem Kopf ist ein breiter Kamm von der Art,

wie sie gewöhnlich auf dem T'aot'ieh-Kopf vorkommt. Das Maul ist weit und U-förmig, die Ohren sind spitz. Unterhalb des Maules ist ein blattartiges Ornament, wie es oft auf frühen chinesischen Bronzen vorkommt und welches gewöhnlich als stilisierte Zikade gedeutet wird. Hier nimmt dieses Motiv beinahe die ganze Vorderseite des Körpers ein ... Die Arme sind ziemlich schlank, die Oberarme sind gerade ausgestreckt, die Unterarme gehen nach unten, und die langen Hände sind nach oben gekehrt. Sie enden in zwei klauenartigen Fingern. Die Unterteile der Figur sind ausgesprochen menschenähnlich in Form und Haltung, obwohl jeder Fuss nur vier Zehen besitzt und diese in umgekehrter Reihenfolge angeordnet sind, sodass der Grosse Zeh an der Aussenseite erscheint".

Weiterhin zieht Karlbeck zwei Shang-Funde zum Vergleich heran, die Sumitomo-Pauke[2] mit ihrem nahverwandten Dekor eines hockenden Fabelwesens mit gehörntem Menschenkopf und mit aufwärts gebogenen Klauenarmen, und die Scherben eines gekerbten weissen Gefässes von der bekannten Art der Anyang-Keramik[3]. Hier erscheint das Motiv im Sinne eines Winkel-Ornaments, jedoch erkenntlich an den Klauenarmen und dem V-förmigen Unterkiefer (Abb. 1), während der eigentliche Kopf, noch kaum Form geworden, in dem oberen Streifen als eine Anordnung gegenständiger linearer Gebilde mit ovalen Augen nur erst angedeutet ist. Hinzu kommt "ein Paar langer, ausgebreiteter Geweihe". Die gleiche geometrische Stilisierung der Gestalt und des V-förmigen Unterkiefers, aber in der oberen Zone mit einem leicht reliefierten, zur straffen Maske verdichteten T'aot'ieh-Kopf mit naturalistischem Oberkiefer kommt auf einem anderen Fragment[3] der gleichen Ware vor (Abb. 2).

Vielleicht darf man es wagen, in den genannten Beispielen die Rudimente einer Entwickelungsreihe zu sehen. Eine unregelmässige Verbindung von Zickzackmuster und Hakenband-Dekor[4] wäre die hypothetische Anfangsstufe; der lockere, geometrische T'aot'ieh-Kopf im oberen Ornamentbande und der VVV-artig aufgelöste Körper mit Klauenarmen würden der nächsten, schon deutlich sinnbetonten Entwickelungsphase angehören (Abb. 1); die zusammengefasste Maske im oberen Streifen, bei gleichen Winkelhaken und Klauenarmen in der Hauptzone würde folgen (Abb. 2), erst jetzt aber die naturalistisch angedeutete Form des vollständigen Fabelwesens (Abb. 3). Nun aber würde der umgekehrte Prozess einer Entsinnlichung einsetzen, mit anderem Vorzeichen, der halbmenschliche Dämon in ein Gewebe ausgespannter Ranken aufgelöst werden, mit noch sichtbaren, fast schlangenhaft aufzüngelnden Klauenarmen (I, g; Abb. 5).

Das grosse T'aot'ieh-Ornament der Standglocke Lochow deutet diese verschiedenen, mehr oder minder stilisierten oder naturalistischen Elemente auf das geistreichste um in eine linear aufgelöste, homogene

Maske. Auch sie ist geometrisch im Charakter, aber mit einer ausgesprochenen Tendenz zur Rundung, zum pflanzenhaften Rankenmuster mit kraftvollen Kurven und Gelenken. Das Ergebnis ist wieder abstrakt, jedoch beherrscht von einem Formwillen, welcher der früheren, noch keramisch bestimmten Periode fremd war. Dieser "neue" Formwille würde einem entwickelten Gefühl für organische Zusammenhänge, für innere Spannungen und schwungvolle Übergänge entsprechen. Die Arme mit den Klauenhänden sind als emporstrebende Kletterranken erkennbar. In Ranken, zugleich aber in die Nasenflügel eines T'aoti'eh ist auch das blattartige Motiv samt der Beine und Füsse umgestaltet; die Geweihe sind raumfüllend nach unten gebogen und treffen sich mit den nach oben weisenden "Klauen"-Ranken, aus den geschweiften Augen sind ovale Buckel geworden.

Das von Karlbeck als "Kamm" gedeutete Motiv (Abb. 3) erscheint auf der Glocke Lochow im oberen Rahmen über dem Hauptfeld in Form des üblichen Spiraldekors der Frühzeit. Dagegen scheint das in sich geschlossene Muster der Anschlagstelle (I, g), unter Wiederholung des Geweihmotivs, auf die Anordnung eines T'aot'ieh-Kopfes im oberen Streifen der weiss-keramischen Ausführungen dieses anthropomorphen Ornaments zurückzugehen (Abb. 1, 2), bei Anklängen an den Dekor des Hauptfeldes.

Das vollständige Ornament auf den Wandungen der Glocke Lochow erschliesst sich als eine gewaltige, kalligraphisch inspirierte Maskenphantasie (I, a, g).

Freilich, von einer sicheren Datierung der Lochow'schen Glocke kann bei aller Reife und Endgültigkeit ihrer Schmuckformen keine Rede sein, da es an datiertem Vergleichsmaterial fehlt. In dieser Sonderart des Dekors ist sie überhaupt das einzige erhaltene Beispiel, wenn wir von den nur unzulänglich auf uns gekommenen Illustrationen nahverwandter Stücke im *Po-ku-t'u-lu*[5] absehen (Abb. 4). Der Glocke Lochow verwandt ist auch das Nao der Sammlung Holmes[6], weniger in der technischen Ausführung als im Stil des Dekors, aber es ist ebenfalls ein vereinzeltes Stück, und eine Analyse seiner Ornamentierung führt nur auf die gleichen Ursprünge zurück, jedoch nicht weiter in Fragen der Datierung.

Immerhin sollte man annehmen, dass der trotz seiner Grösse so elegante Stil der Lochow'schen Glocke jünger sei als die strenge Formauffassung der Masken auf den bekannten Handglocken vom Nao-Typ[7]. Wie die Sumitomo-Pauke, wie der von Karlbeck besprochene Marmor-Dreifuss und wie die genannten keramischen Fragmente gehören diese z. T. beschrifteten Nao-Glocken der Shang-Zeit an, innerhalb deren die

zeitliche Folge der verschiedenen Ornamentformen erst noch endgültig ermittelt werden muss.

Jünger dagegen als das Lochow'sche Nao muss eine andere Glocke sein, welche bis vor kurzem viel zu früh angesetzt wurde. Die Inschrift der Glocke Po 鎛 "des Herzogs von Ch'u"[8], die sie in den Anfang der Westlichen Chou-Dynastie datieren würde, wird heute allgemein für falsch gehalten[9]. Die Glocke selber aber ist echt. Äusserlich ist ihr Typus dem Typus der Standglocke Lochow nahe verwandt. Identisch ist die Aufteilung der beiden Aussenflächen in Spiralrahmen und Hauptfeld, gleich sind auch die Proportionen (Abb. 6; I, g), sogar die Abmessungen stimmen. Doch hängt die Glocke nun, und auch ihr Stil scheint schon einer späteren Entwickelungsstufe, einer Übergangszeit anzugehören. Der Dekor der Wandung ist in zwei gerahmte Halbfelder unterteilt, mit vertikaler Trennungslinie anstelle des oben gespaltenen Nasenrückens mit den Nasenflügeln. Das Ornament der Halbfelder zerfällt in eintönig sich wiederholende, schon allzu rundliche Spiralen. Die beiden ovalen Augäpfel der Lochow'schen Glocke sind zu achtzehn runden Spiralbuckeln sinnlos vervielfältigt. Der Dekor der Anschlagstelle besteht aus einem selbständigen Ornament mit Augen, einer wenig kraftvollen Weiterentwickelung des entsprechenden Ornaments der Glocke Lochow (I, g) und der noch früheren Form des Motivs (Abb. 1).

Vielleicht darf man vorläufig das Nao Lochow, zusammen mit den Beispielen des *Po-ku-t'u-lu* und der Glocke Holmes, in den Anfang, das fragliche Po aber in die Mitte der Westlichen Chou-Dynastie datieren.

Bei Wahl der Bezeichnung "Nao" für die Lochow'sche Standglocke konnte auf eine noch offene Streitfrage keine Rücksicht genommen werden. W. P. Yetts hat sich mit der Terminologie der verschiedenen Klassen früher Glocken ausführlich befasst[10], Jung Keng die Frage erst vor kurzem behandelt[11]. Trotzdem herrscht noch keine Klarheit in der Unterscheidung der Klassen Nao 鐃 und Cheng 鉦. Lo Chen-yü glaubt im Sinne der Angaben des *Chou-li* zu urteilen, wenn er sich für die Bezeichnung "Nao" entschliesst, auch bei den dort als "Cheng" angeführten Glocken des *Po-ku-t'u-lu* (Abb. 4). Jung Keng hingegen folgt dem *Po-ku-t'u-lu*, welches das Nao nicht kennt und seinerseits auf die Definition des *Shuo-wen* zurückgeht. Im Anschluss an Lo Chen-yü wurde hier, bis auf weiteres, die Klassifizierung der älteren Schule übernommen.



Abb. 1

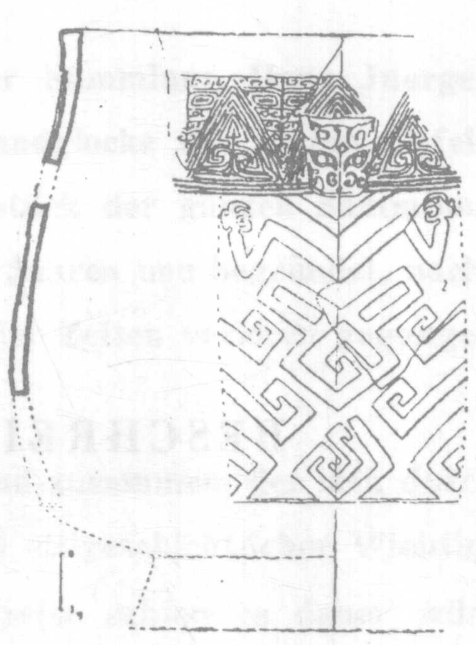


Abb. 2

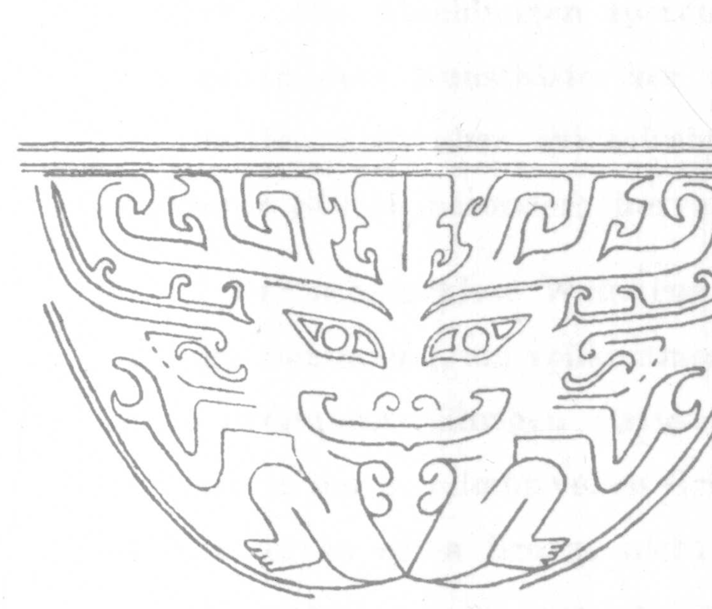


Abb. 3



Abb. 4

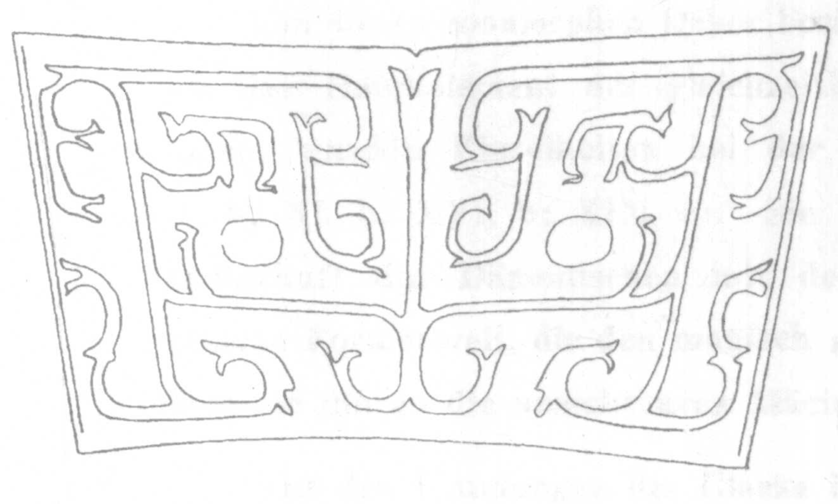


Abb. 5



Abb. 6

Anmerkungen.

1) O. Karlbeck, *Anyang Marble Sculptures, The Museum of Far Eastern Antiquities, Bulletin* No. 7, 1935, pp. 63-65, Abb. 1 (= unserer Abb. 3).

2) K. Hamada, *Senoku seishō*, I, 3, Abb. 130.

3) S. Umehara, *Yinkyō shutsudo hakushoku doki no kenkyū*, Tf. XX-XXIII (Tf. XXIII = unserer Abb. 1), Abb. 14, 16; *Kanan Anyō ibutsu no kenkyū*, Tf. IX-XV, Abb. 7,8 (Abb. 8 = unserer Abb. 2).

4) Anklingend an gemalten keramischen Dekor der Yangshao-Kultur (s. M. Loehr, *Beiträge zur Chronologie der älteren chinesischen Bronzen, Ostasiatische Zeitschrift*, N. F. XII, 1936, pp. 8-11, Abb. 1,3); oder sogar in bewusstem Anschluss an anthropomorph gedeutete Ornamente der Panshan- und Mach'ang-Keramik (s. N. Palmgren, *Kansu Mortuary Urns of the Pan Shan and Ma Chang Groups*, Peiping 1934, p. 125, Tf. XIII, 2,3 und Tf. XXIV, 3-8; vgl. auch Umehara, *Kanan Anyō* etc., pp. 25-26). Die Maske der Lochow'schen Nao-Glocke wäre dann das Ergebnis einer Entwickelung, welche schon mit Ende des Neolithikums eingesetzt hätte.

5) *Hsüan-ho po-ku-t'u-lu*, ch. 26, fol. 36-46 (fol. 36a = unserer Abb. 4).

6) S. Umehara, *Shina kodō seikwa*, I, 2, Tf. CLVIII; Ausstellung London 1935-36, Nr. 229; Ausstellung New York 1938, Nr. 10.

7) Die von Yetts (s. unten Anm. 10) angeführten Beispiele des *Chou chin-wen-ts'un* wiederholt oder vermehrt bei Lo Chen-yü, *San-tai chi-chin-wen-ts'un*, ch. 18, fol. 8; Huang Chün, *Tsun-ku-chai so-chien chi-chin-t'u*, ch. 1, fol. 11; *Yeh-chung p'ien-yü*, III, ch. 1, fol. 3,4; Jung Keng, *Shang Chou i-ch'i t'ung-k'ao*, II, Abb. 925, 926, u. a. m.

8) Lo Chen-yü, *Meng-wei ts'ao-t'ang chi-chin-t'u*, ch. 1, fol. 2a, bildet eine perspektivisch hergerichtete und daher unvollständige Tuschabreibung ab, die aber die Spiralbuckel gut veranschaulicht. Unsere Abb. 6, hier stehend wiedergegeben, obwohl es sich um eine Hängeglocke handelt, bringt zum ersten Mal eine vollständige Wiedergabe der Tuschabreibung (d. G. von Herrn Huang Chün). Eine Abbildung dieser Po-Glocke nach Photographie ist mir nicht bekannt, wohl aber die Abbildung einer nah verwandten Spiralbuckel-Glocke bei S. Umehara, *Kodōki keitai no kōkogakuteki kenkyū*, Tf. XXXVI, 4.

9) Juan Yüan, *Chi-ku-chai chung-ting i-ch'i k'uan-chih*, ch. 3, fol. 16a, datiert die Inschrift in die Zeit des Ch'eng-wang, 1115-1079 a. Chr. n. Kuo Mo-jo, *Liang Chou chin-wen-tz'ŭ ta-hsi, k'ao-shih*, fol. 164b, setzt sich

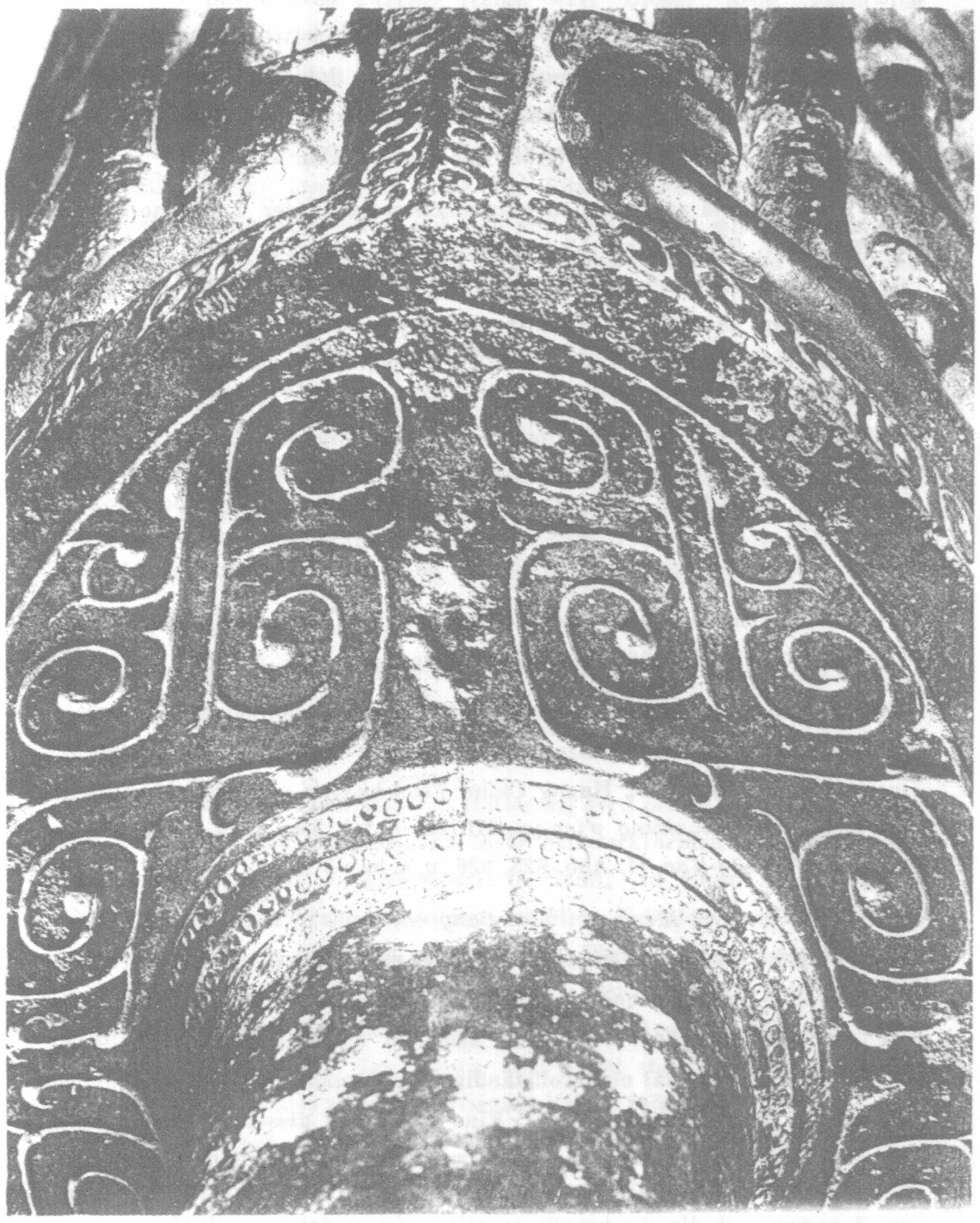
ebenfalls ernsthaft mit der Inschrift auseinander, freilich ohne auf stilkritische Gesichtspunkte hinsichtlich der Glocke Rücksicht zu nehmen. S. auch Kuo Mo-jo, op. cit., *t'u-lu*, Index, fol. 11b, s. v. 楚公逆鎛.

10) W. P. Yetts, *The George Eumorfopoulos Collection Catalogue of the Chinese and Corean Bronzes* etc., London 1929-32, II, pp. 9-10.

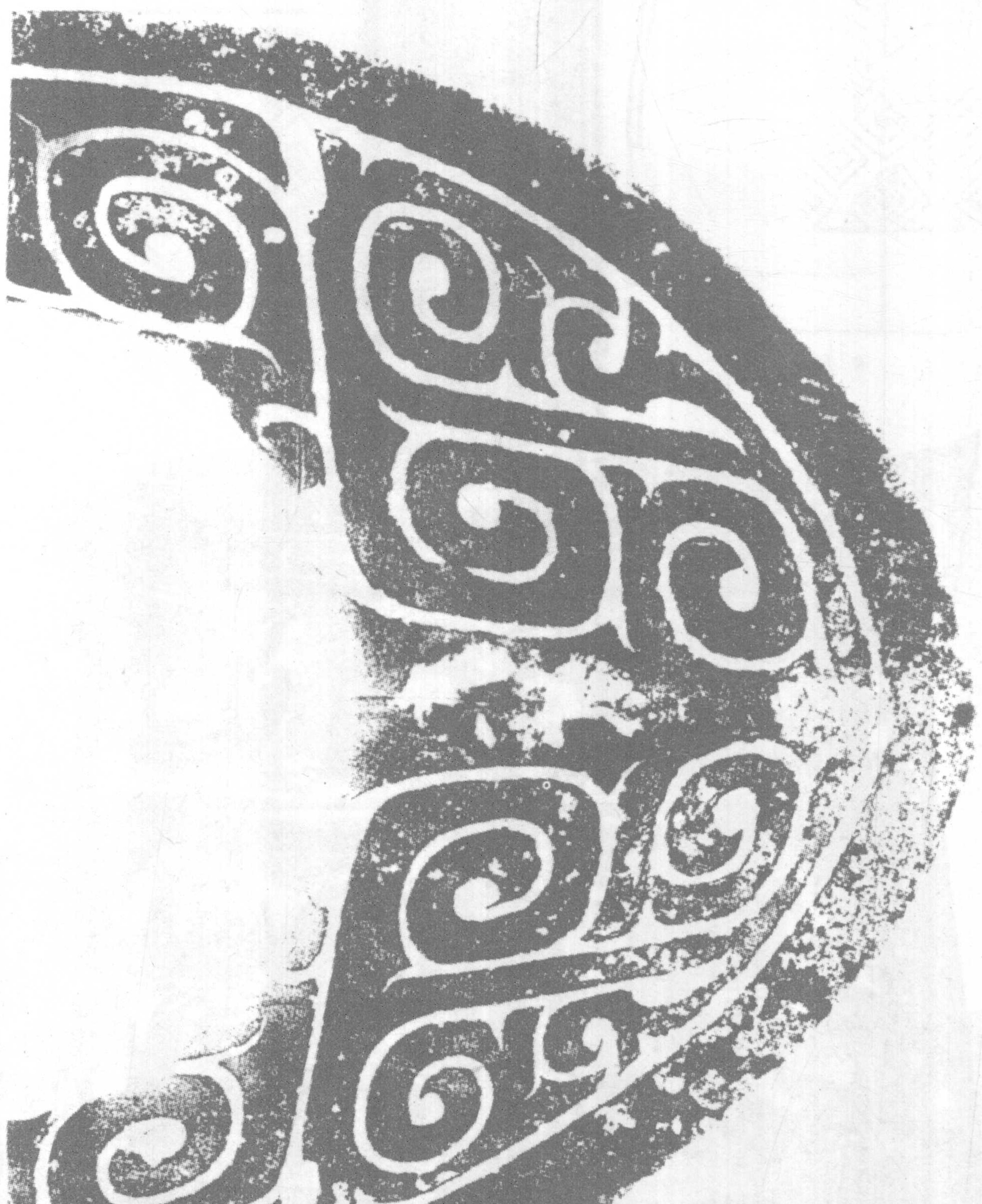
11) Jung Keng, op. cit., I, pp. 485-486.

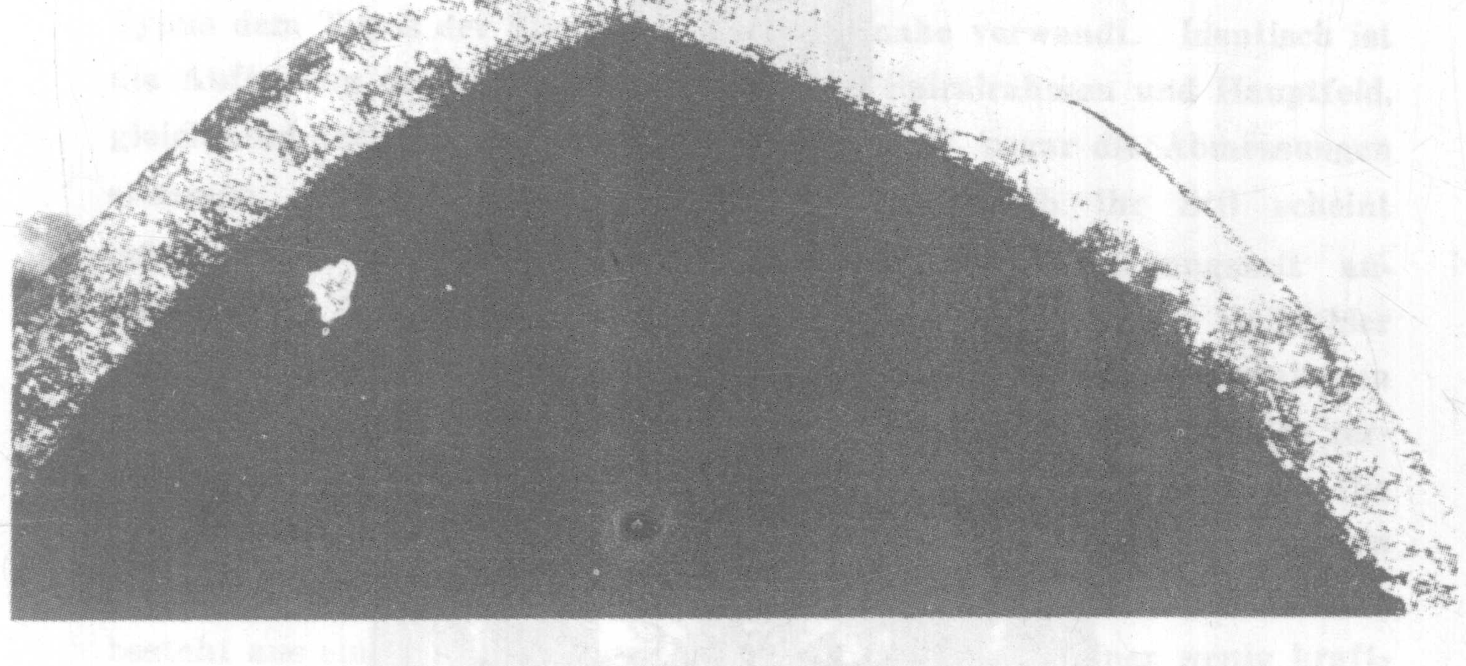


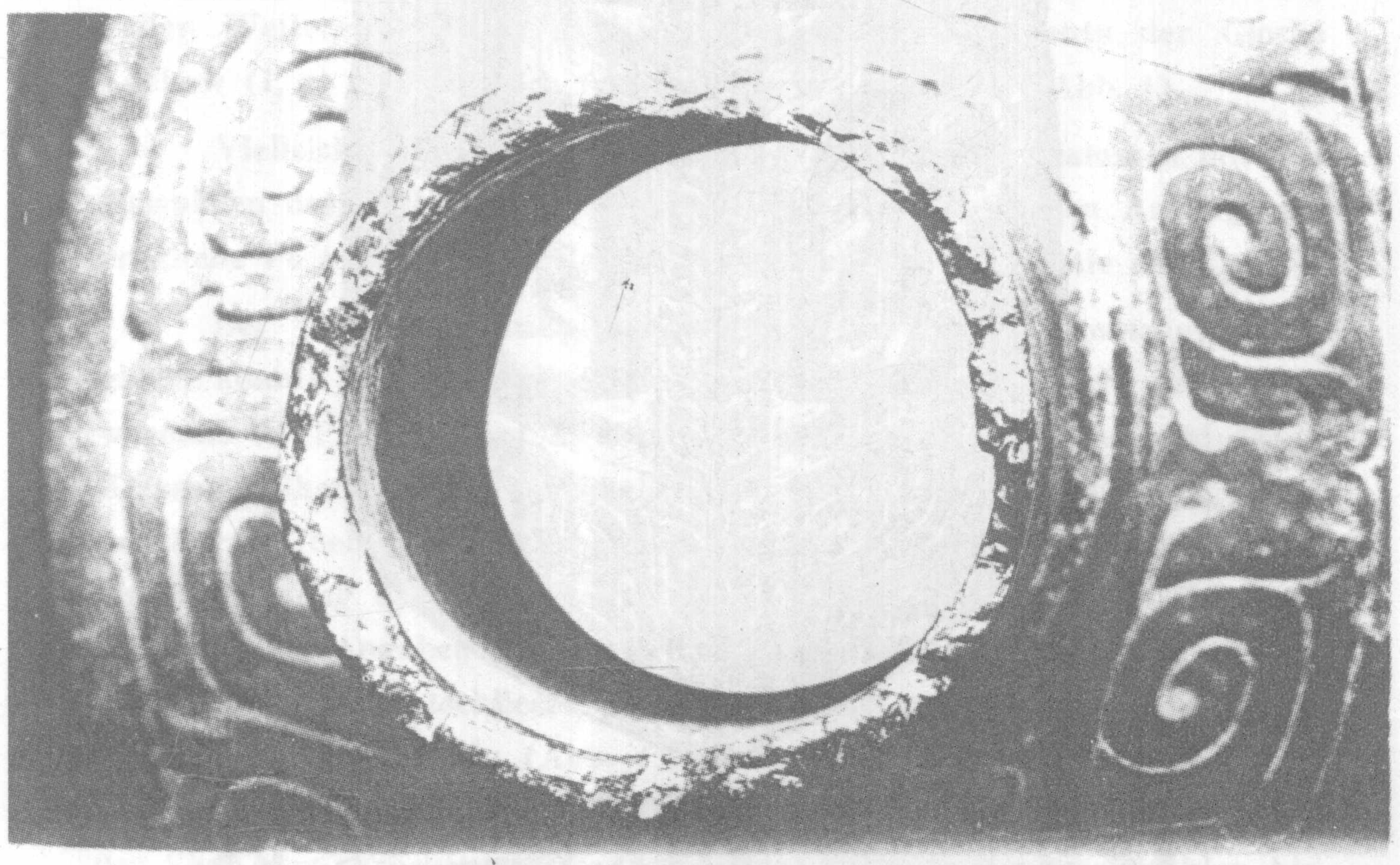












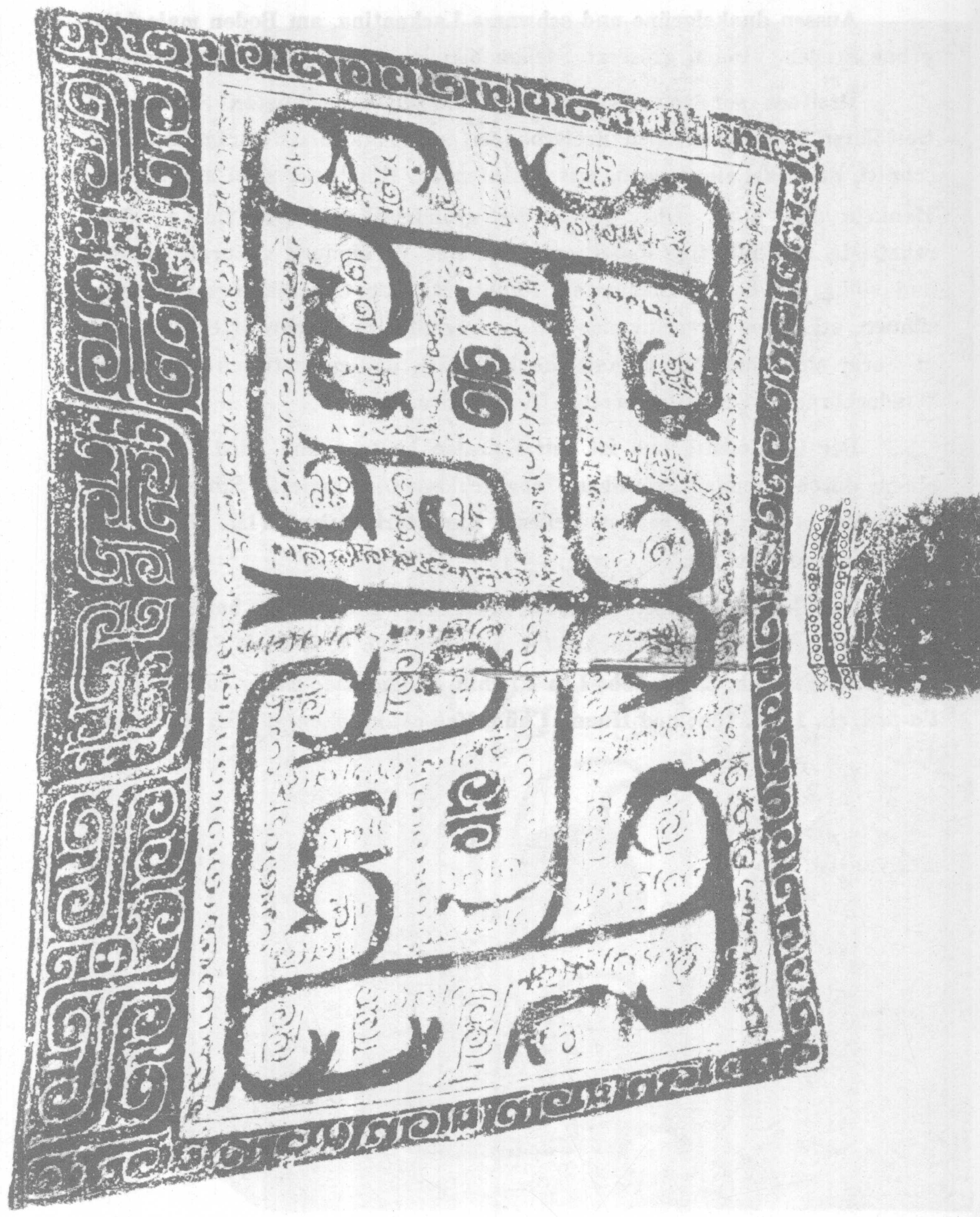
Ting 鼎 (II, a-c)

Shang. Neue Ausgrabung. Ganze Höhe 24,3 cm; Durchmesser der Öffnung 19 cm; Gewicht 4,5 kg.

Patina behandelt, aussen gleichmässig hellgrün, mit Stellen türkisgrüner Lackpatina. An der Unterseite malachitgrüne Krusten. Innen bläulich-grüne, krustige Auflagerungen mit patinierten Lössresten. Ränder an den Füssen als Spuren längerer Berührung mit organischer Substanz.

Dreifuss mit zwei aufrechten Henkeln am oberen Rande des etwa hemisphärischen Kessels. Zylindrische Füsse. Reliefdekor auf Spiralgrund. Sechs gekerbte, durchgehende Reliefstege, von denen drei die Hauptzone der Kesselwandung in drei Felder teilen (II, b); drei zwischen je zwei gegenständigen Rüsseldrachen als Mittelgrate der drei Masken dienen (II, a). Unter dem kräftigen, stark vorspringenden Rand und glattem, vertieftem Streifen ein Ornamentband mit zwölf Schlunddrachen, von denen je zwei und zwei gegenständig über einem Rüsseldrachen im Hauptfeld angeordnet sind. Vertiefte Spiralen und T-Muster in den reliefierten Teilen. An den Aussenseiten der Füsse, unter doppelteiligem Spiralband, je drei vertiefte, hängende Zikadenblätter. Das Merkzeichen (II, c) innen zwischen den Henkeln.

Ein verwandtes Stück in der Sammlung Lundgren, Stockholm, s. B. Karlgren, *Yin and Chou in Chinese Bronzes, The Museum of Far Eastern Antiquities, Bulletin* No. 8, 1936, Tf. VI, A-38; s. auch J. M. Plumer, *An Exhibition of Ancient Chinese Ritual Bronzes (loaned by C. T. Loo & Co.)*, Detroit 1940, Tf. VI (4).







Ting 鼎 (III, a-d)

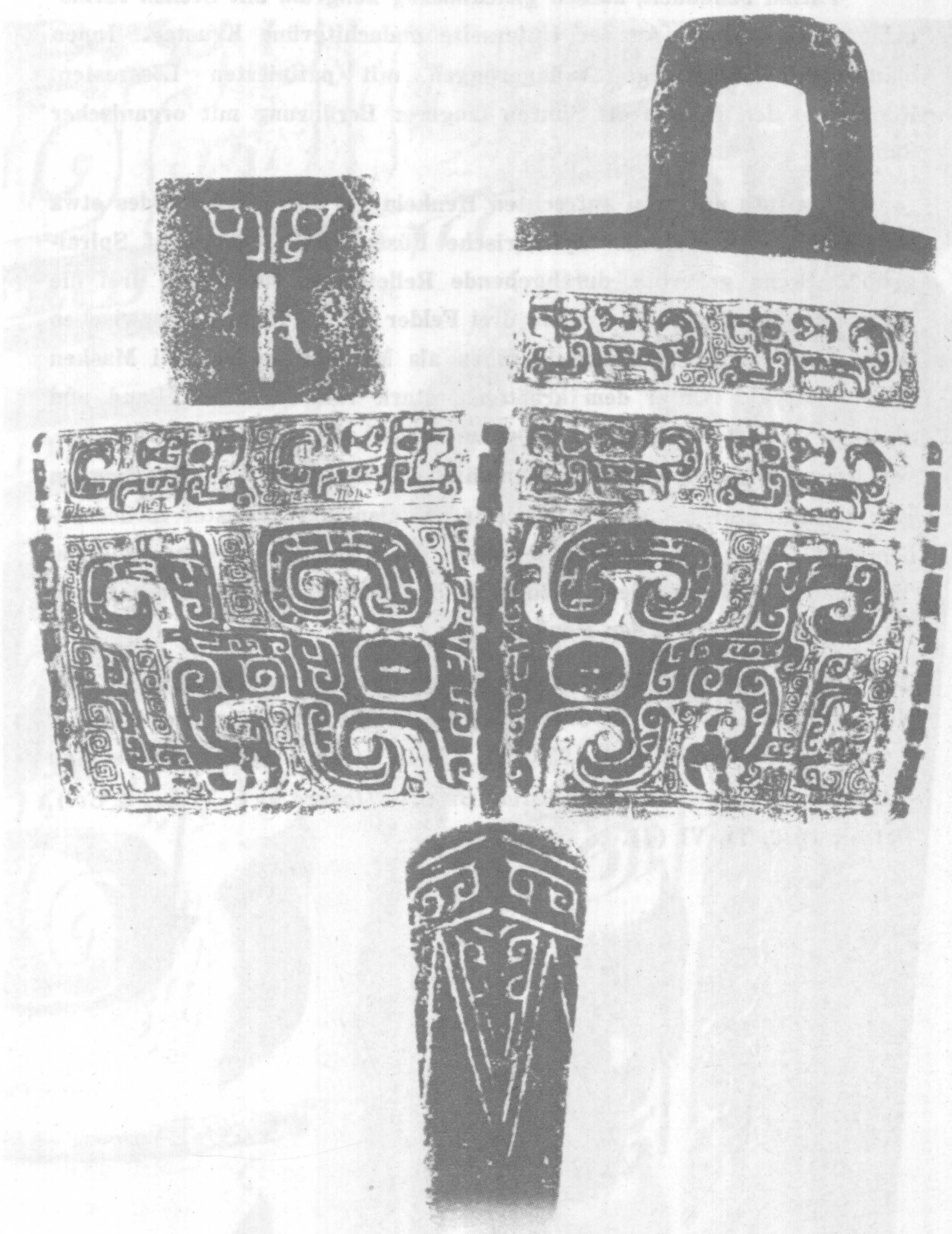
Shang. Neue Ausgrabung aus Anyang. Ganze Höhe 20,6 cm; Durchmesser der Öffnung 17 cm; Gewicht 2,25 kg.

Aussen dunkelgrüne und schwarze Lackpatina, am Boden malachitgrüne Stellen. Innen grössere Stellen bläulichgrüner Verkrustungen.

Dreifuss der von Karlgren als *Li-Ting* bezeichneten Sonderart. Gewölbter Kessel von oben kreisrundem, unten kleeblattförmigem Querschnitt, der Hals eingezogen, mit ausladendem Rand und zwei aufrechten Henkeln (III, a-b). Über jedem der zylindrischen Füsse eine kräftig reliefierte, kapitellartige Fabeltiermaske, eine Verbindung naturalistischer und völlig stilisierter Elemente. Raubtierartiger Oberkiefer mit Fangzähnen, stark hervorspringende runde Augäpfel in geschweifter Lidfalte in Form eines hakigen Falkenschnabels (III, d), geometrisch stilisierte Widderhörner. Sechs senkrechte Schlunddrachen.

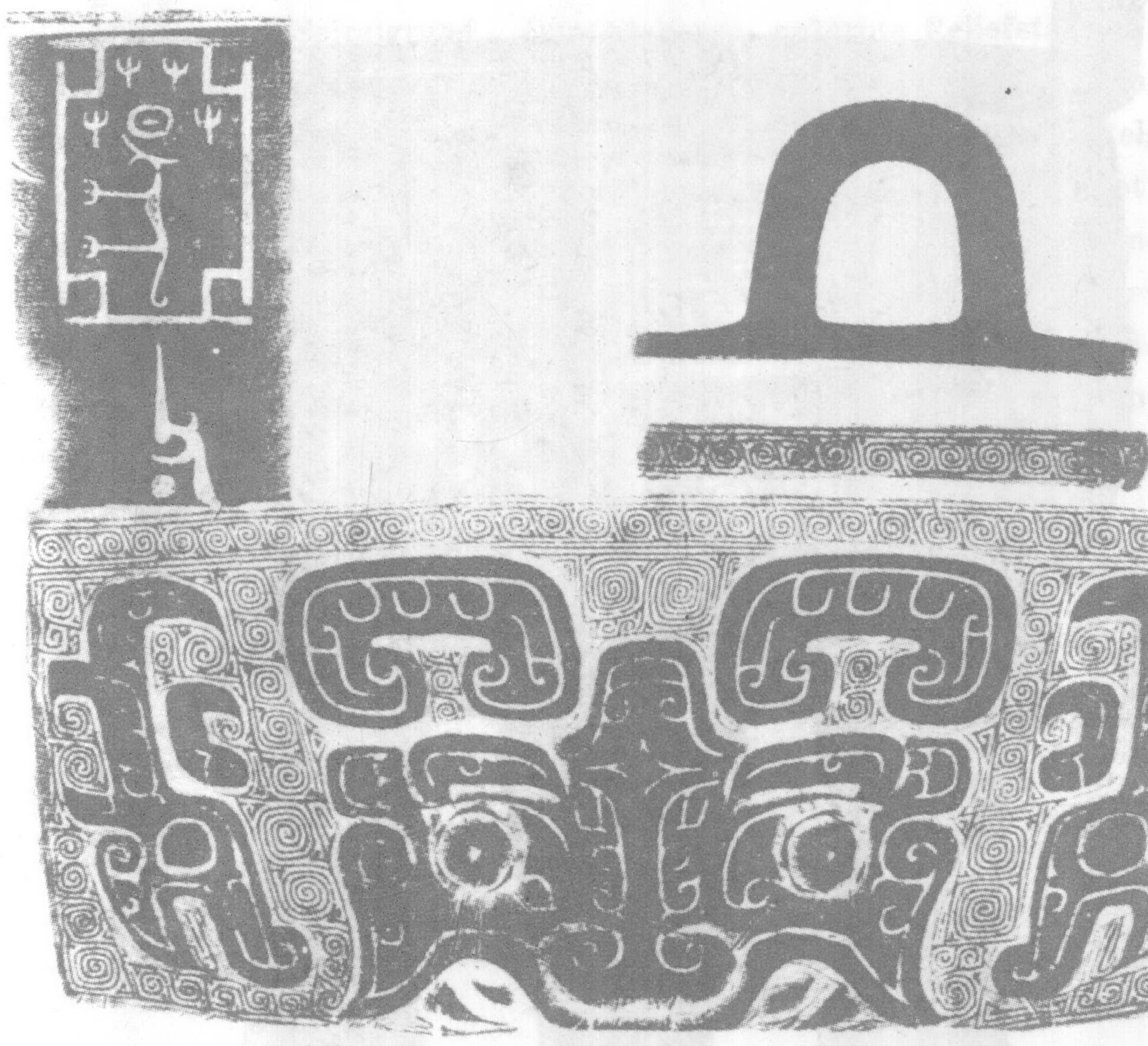
Der Ornamentgrund ist mit Spiralen bedeckt und wird oben von einem durchgehenden Spiralband abgeschlossen. Vertiefte Spiralen und T-Muster in den reliefierten Teilen. Ein Merkzeichen (III, d) innen zwischen den Henkeln.

Das Gegenstück mit Variation desselben Piktogramms bei Lo Chen-yü, *Meng-wei ts'ao-t'ang chi-chin-t'u, hsü-pien*, fol. 4; s. auch *San-tai chi-chin-wen-ts'un*, ch. 2, fol. 38b; Liu T'i-chih, *Hsiao-chiao-ching-ko chin-wen t'a-pen*, ch. 2, fol. 16b; und Huang Chün, *Yeh-chung p'ien-yü*, III, ch. 1, fol. 32b.











Ting 鼎 (IV, a-e)

Anfang Chou. Alte Ausgrabung. Ganze Höhe 37,7 cm; Durchmesser der Öffnung 29,6 cm; Gewicht 9,25 kg.

Behandelte, gleichmässig dunkelgrüne Patina. Im vertieften Dekor Reste schwarzer Pigmenteinlage.

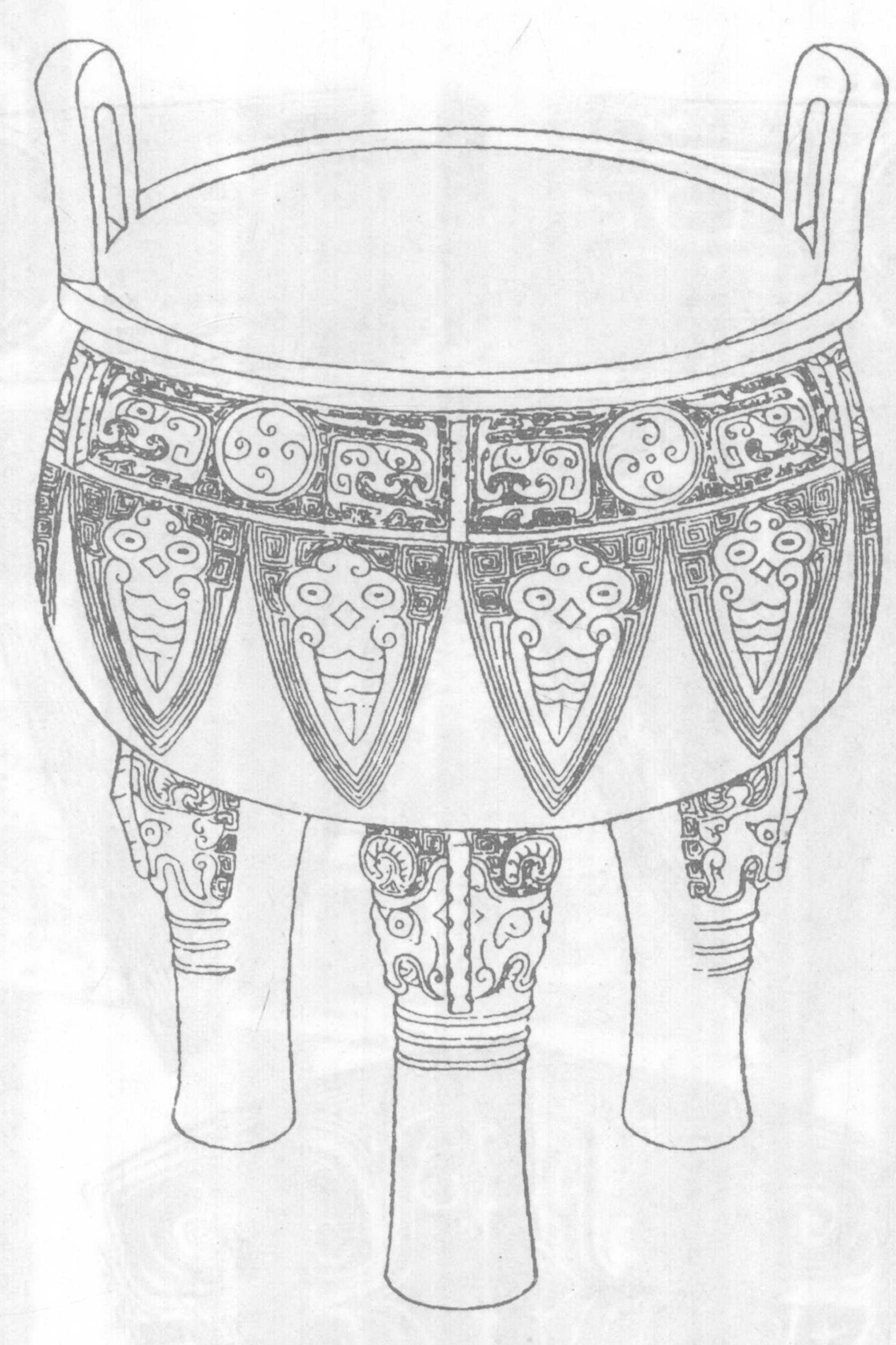


Abb. 7

Dreifuss mit aufrechten Henkeln. Die Aussenfläche des knollenförmigen Kessels unterteilt in Hauptzone und schmales Ornamentband unter glattem Streifen und ausladendem Rand. In der glatten Hauptzone kranzartige Anordnung von zwölf leicht erhöhten hängenden Schilden, auf dem Spiral- und Liniengrund der Schilde zwölf reliefierte hängende Zikaden (IV, c). Im Ornamentband, über je zwei Zikaden, eine Anordnung von je zwei flachen, aufgelösten drachenartigen Ornamenten auf Spiralgrund, mit ovalen Augenbuckeln und mittlerem Wirbelkreis (IV, d-e), je zwei Drachenornamente auf mittlerem Reliefsteg gegenständig

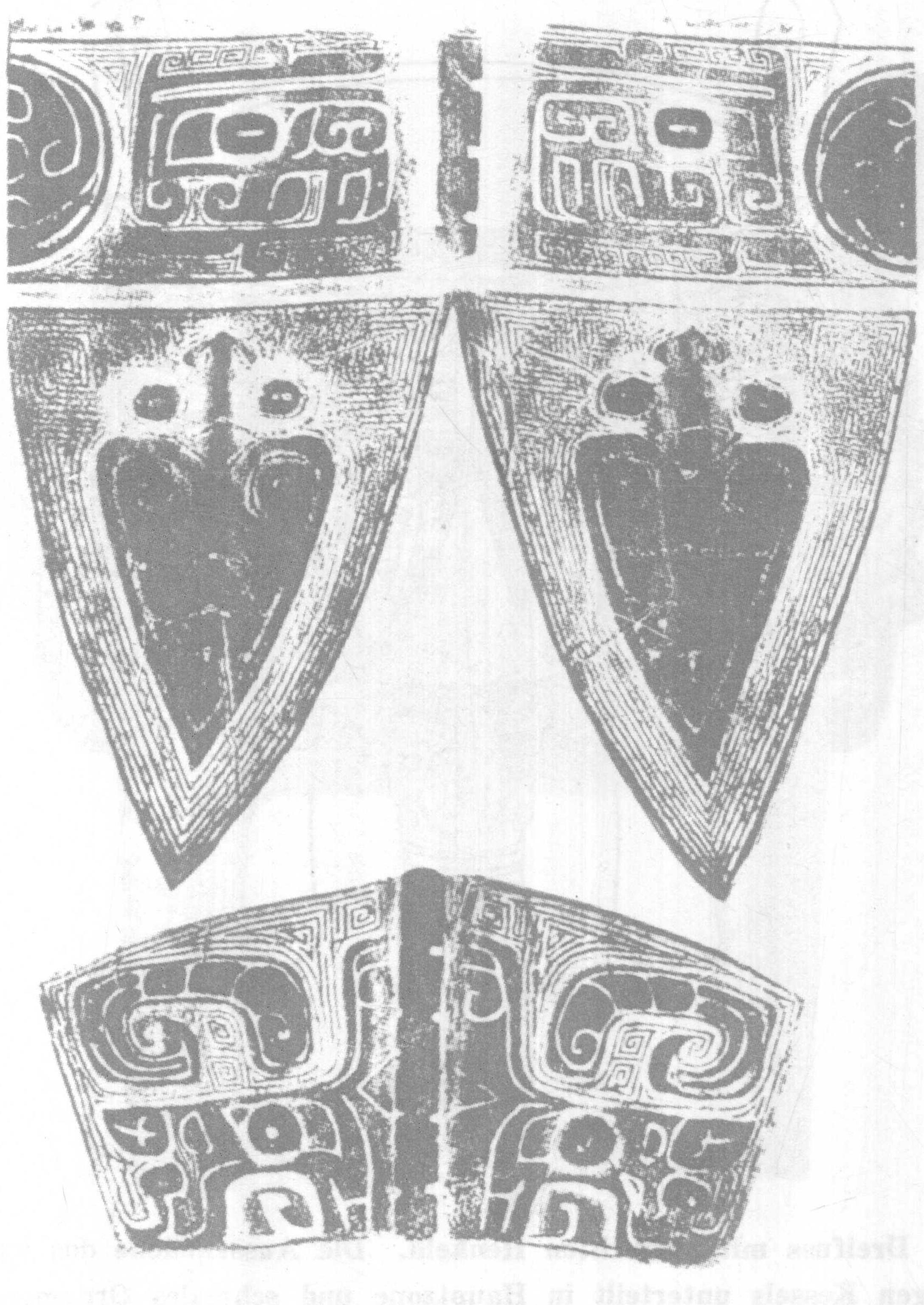
(IV, a). Von den so entstehenden sechs T'aot'ieh-Masken haben drei auseinanderstehende Augen (IV, a).

Füsse oben und unten verdickt. Die kapitellartigen Ansätze bestehen aus T'aot'ieh-Masken mit stachelförmigem Mittelgrat, diese aus je zwei gegenständigen Rüsseldrachen über doppeltem Sehnenornament (IV, c-d).

Abgesehen von einer naturalistischen Entstellung der Kapitellmaske, der Hinzufügung einer dritten Sehne und anderen geringen Abweichungen stimmt die bildliche Wiedergabe des *Hsi-ch'ing ku-chien* (Abbildung 7 = ch. 6, fol. 36a) mit dem ebenfalls inschriftlosen Ting der Sammlung Lochow überein. Bei Zugrundlegung der Zimmermanns-Einheit (營造尺) der Kienlung-Zeit ergeben sich gleiche Abmessungen. Abbildung 7 auch bei H. d'Ardenne de Tizac, *L'Art Chinois Classique*, Paris 1926, p. 95.







(IV, a). Von den so entstehenden sechs T'ao-t'ieh-Masken haben drei auseinanderstehende Augen (IV, a).

Füße oben und unten verdickt. Die kapitellartigen Ansätze bestehen aus T'ao-t'ieh-Masken mit stachelförmigem Mittelgrat, diese aus je zwei gegenständigen Rüsseldrachen über doppeltem Schuppenornament (IV, c-d).



Ting 鼎 (V, a-d)

Shang. Neue Ausgrabung aus Anyang. Ganze Höhe 20,6 cm; Durchmesser der Öffnung 13,8 × 16,2 cm; des Bodens, von unten gemessen, 10,5 × 13,7 cm; Gewicht 2,75 kg.

Türkisfarbene Lackpatina der reliefierten Teile auf dunklerem Ornamentgrund, oxidulrote Stellen. Innen malachitgrüne Auflagerungen, patinierte Lösskrusten.

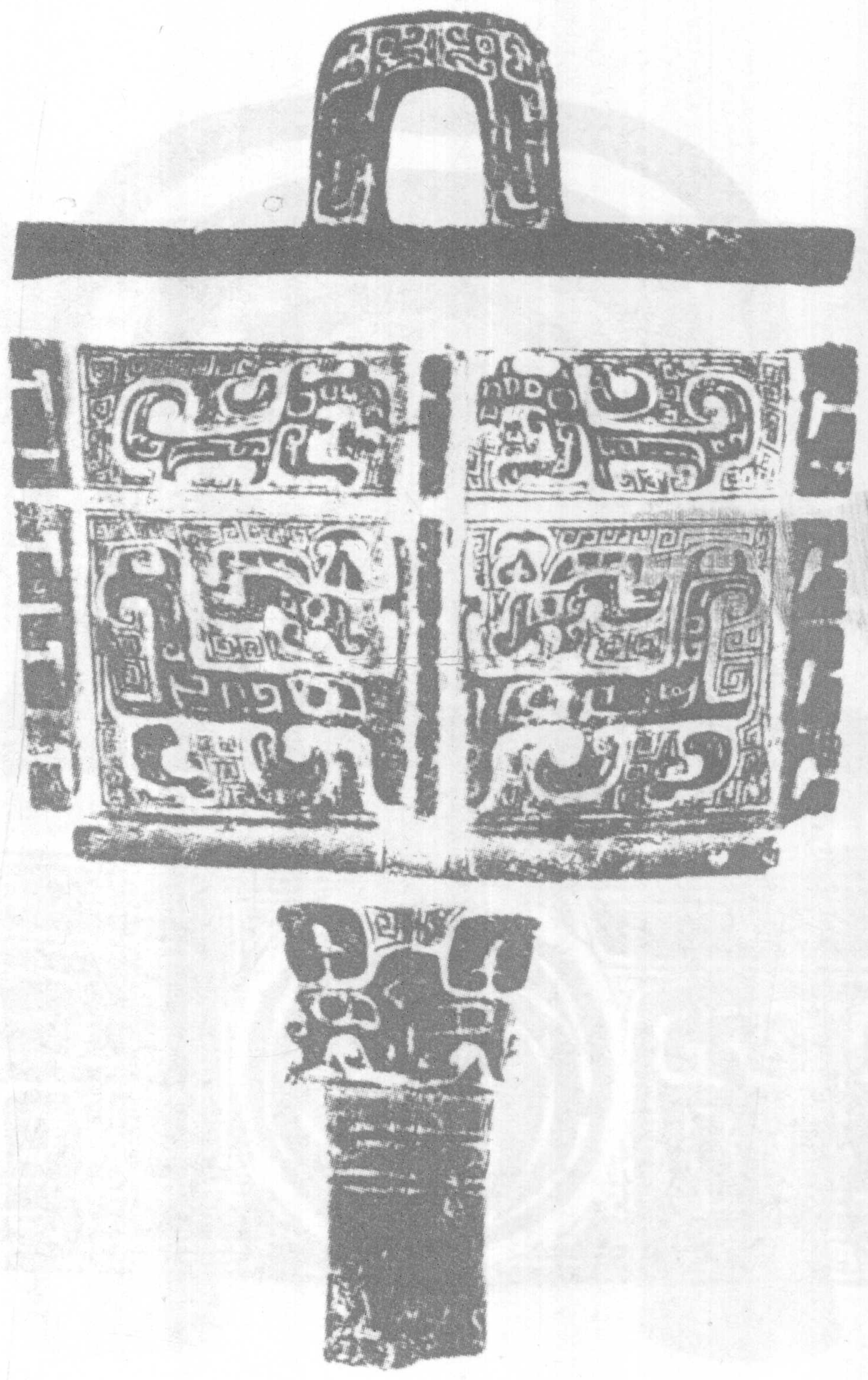
Rechteckiger Kessel auf vier runden Füssen, mit starkem, vorstehendem Rand und aufrechten Henkeln auf den Schmalseiten, mit Reliefdekor auf Spiralgrund. Durchgehende, gekerbte Reliefstege in der Mitte der vier Felder und diagonal an den vier Kanten. Die Füsse ähnlich, doch einfacher als bei Bronze IV, die Kapitellmasken ohne Mittelgrat (V, d). Auf den vier Feldern in der Hauptzone je eine komplexe T'aot'ieh-Maske, aus je zwei gegenständigen Rüsseldrachen bestehend mit kleineren Schlunddrachen auf dem Rücken; in der schmalen oberen Zone je zwei gegenständige Schlunddrachen (V, c-d). Aussen an den Henkeln vertiefte, gegenständige Vogelornamente (V, d); vertiefte Spiral- und Schuppenornamente in den reliefierten Teilen der Gefässwandungen. Ein Merkzeichen (V, c) innen in der Mitte des Bodens.

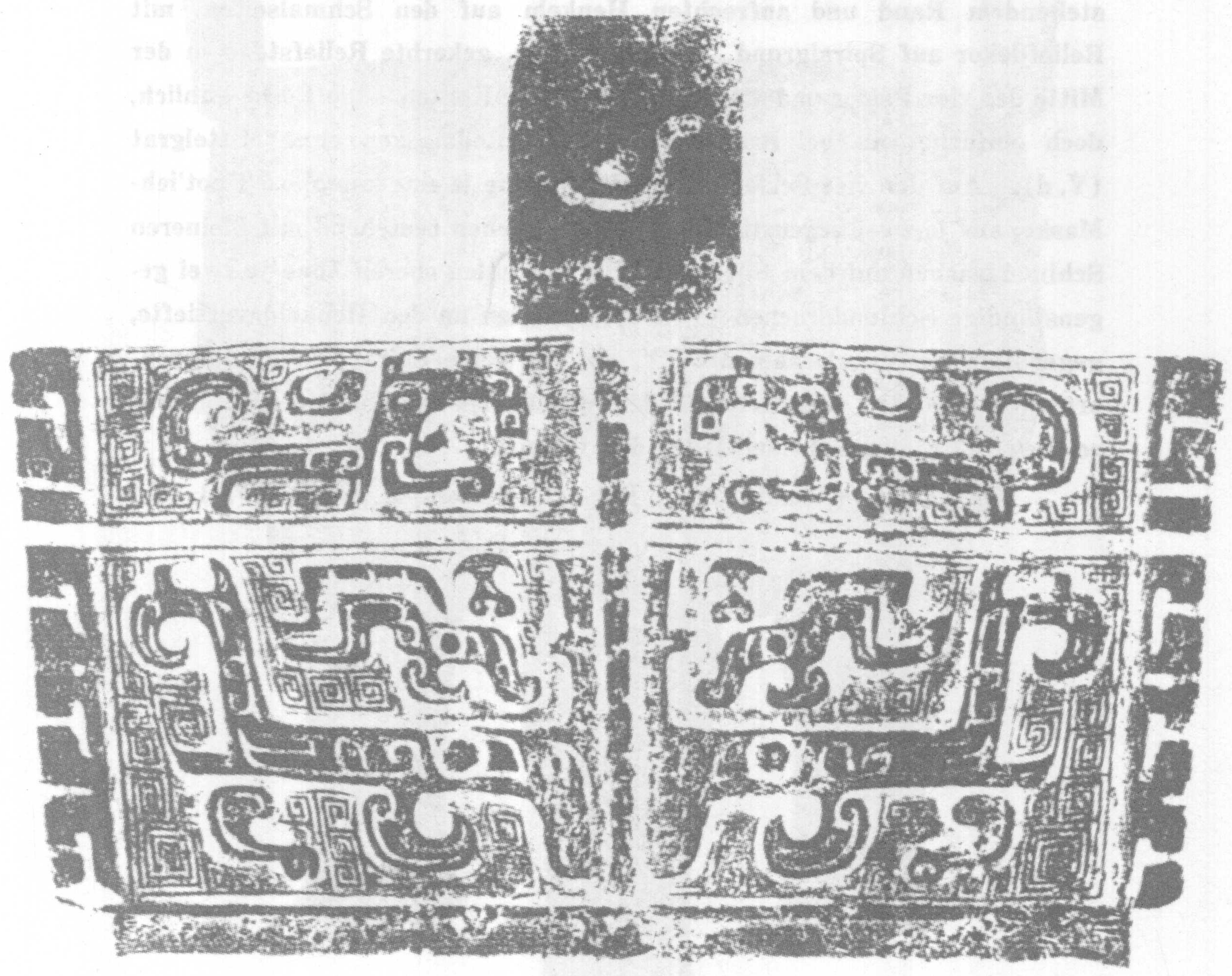
Abgebildet in Huang Chün, *Yeh-chung p'ien-yü*, III, ch. 1, fol. 13.











Anmerkungen.

1) Juan Yüan, op. cit., ch. 4, fol. 5a, (= unserer Tf. VI, a).

2) Wu Tung-fa 吳東發, *tzŭ* K'an-shu 侃叔, Kienlung-Zeit; seine Analyse findet sich im *Chung-ting k'uan-chih shih-wen* 鐘鼎款識釋文 (s. *Chung-kuo jen-ming ta-tz'ŭ-tien*, p. 315, 1).

3) Hsüeh Shang-kung 薛尚功, *Li-tai chung-ting i-ch'i k'uan-chih* 歷代鐘鼎彝器歘識.

4) *ed. Ssŭ-pu ts'ung-k'an* 四部叢刊, ch. 6, fol. 39a, 83b-89a; Biot, *Le Tcheou-li*, II, pp. 99-100.

5) ed. *Ssŭ-pu ts'ung-k'an*, ch. 6, fol. 30a; Biot, op. cit., II, p. 85.

6) ed. *Ssŭ-pu ts'ung-k'an*, ch. 1, fol. 31b; Biot, op. cit. I, p. 87.

7) 禽者何，鳥獸之總名. Vgl. *Po-hu-t'ung su-cheng* 白虎通疏證 von Ch'en Li 陳立 (ed. *Huai-nan shu-chü* 淮南書局, 1875), ch. 12, fol. 19a. Das letzte Chüan, nämlich Chüan 12, findet sich nicht in der Yüan-Ausgabe des *Po-hu-t'ung tao-tê-lun* 白虎通道德論 (neugedruckt in *Ssŭ pu ts'ung-k'an*); sie enthält nur 10 Chüan (der Inhalt dieser 10 Kapitel ist in dem *Po-hu-t'ung su-cheng* auf 11 Kapitel verteilt). Das zwölfte Chüan umfasst die folgenden Titel: 郊祀，宗廟，朝聘，貢士，車旂，田獵 (unter dem letzten Titel findet sich die zitierte Stelle), 雜錄. Chüan 12 der oben angeführten Ausgabe ist nach Zitaten aus verschiedenen Enzyklopädien (lei-shu 類書), Kommentaren u. s. w. von Chuang Shu-tsu 莊述祖 wiederhergestellt worden. Die Stelle wird auch wiedergegebem im *Tz'ŭ-hai* 辭海, s. v. 禽 (午 226a). (Nach Mitteilungen von Herrn Achilles Fang, *Monumenta Serica*).

Ting 鼎 (VI, a-e)

Anfang Chou. Alte Ausgrabung. Ganze Höhe 24 cm; Durchmesser der Öffnung 16 × 18,3 cm; des Bodens, von unten gemessen, 12,1 × 15 cm; Gewicht 3 kg.

Patina behandelt, dunkelgrün mit hellgrünen und blauen Flecken, die obere Zone mit Stellen schwarzer Lackpatina, aussen und innen malachitfarbene Verkrustungen.

Rechteckiger Kessel auf vier zylindrischen Füssen, mit aufrechten glatten Henkeln über den Schmalseiten. Auf den vier Seiten gleichartige Schmuckformen. Unter dem vorspringenden Rand Ornamentstreifen mit aufgelockerten Drachen- und T'aot'ieh-Motiven, in der Mitte jeder Seitenfläche ein glattes Feld, unten und seitlich von dreifachen Buckelreihen umrahmt.

Bemerkenswert sind der erhöhte Boden mit diagonalen Gussnähten und der so entstandene Hohlraum mit zargenartigem, unterem Teil der Wände (VI, c).

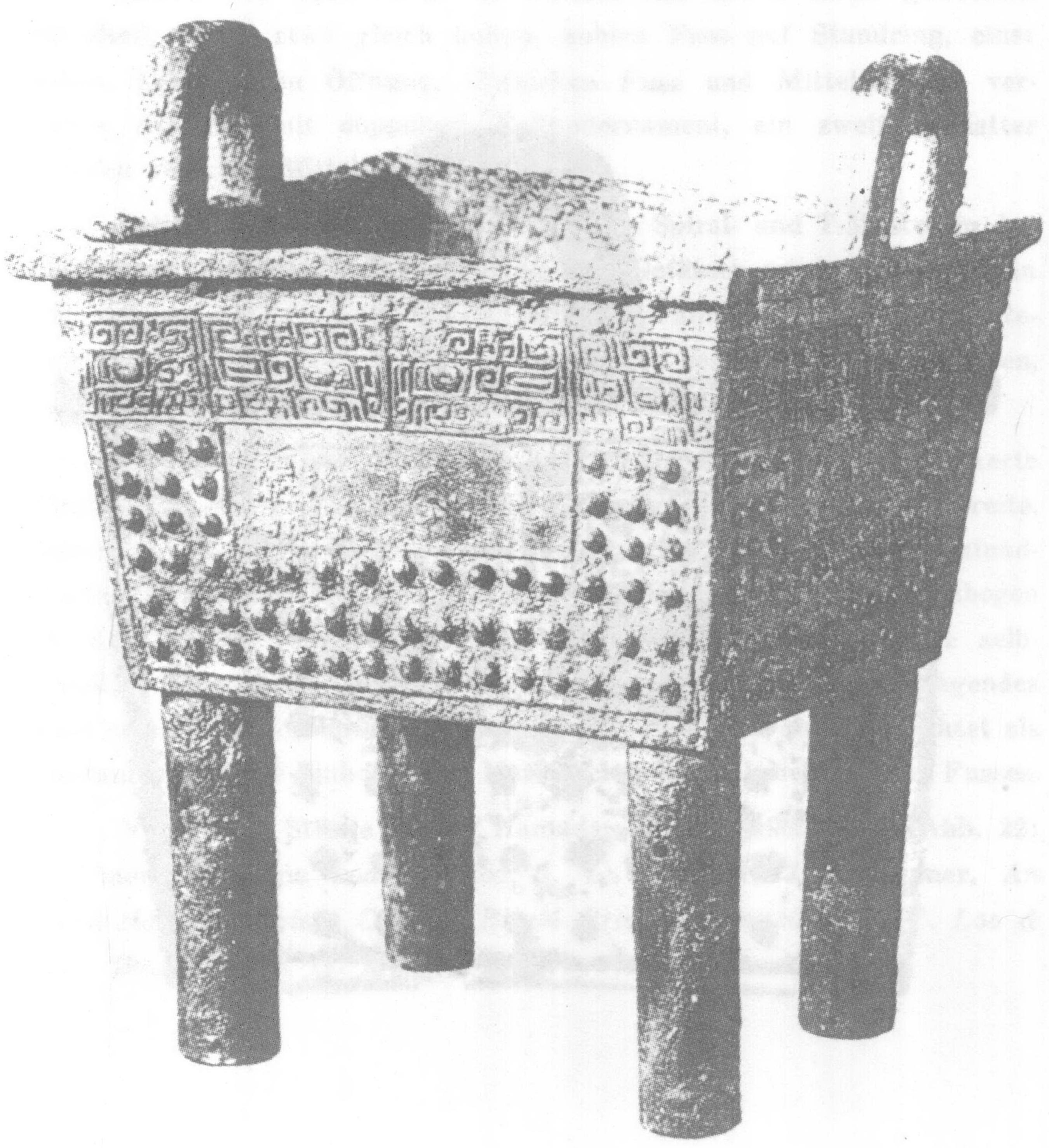
Früher Sammlung Juan Yüan. Abgebildet in Huang Chün, *Tsun-ku-chai so-chien chi-chin-t'u*, ch. 1, fol. 24; B. Karlgren, *New Studies in Chinese Bronzes, The Museum of Far Eastern Antiquities, Bulletin* No. 9, 1937, Tf. XXVIII, 18.

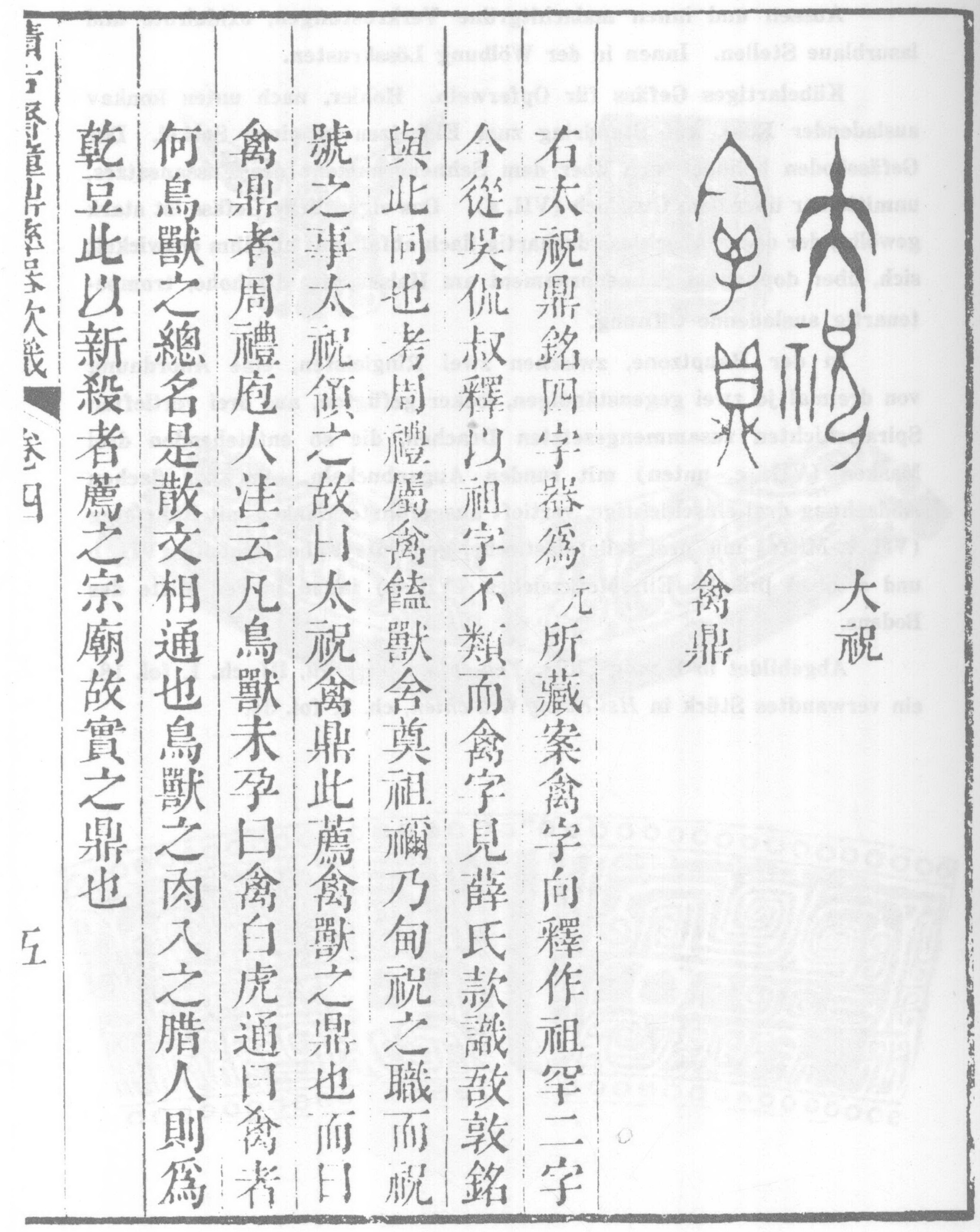
Zu der Inschrift, innen in einer der Breitseiten (VI, d, a), gibt Juan Yüan folgende Erläuterung[1]:—

"Rechts die vier Zeichen der Inschrift auf dem T'ai-chu-Kessel, einem Stück meiner Sammlung. Das Zeichen *ch'in* wurde bisher in die beiden Zeichen *tsu* und *han* zerlegt. Ich folge hier dem Wu K'an-shu[2], weil die Form (der oberen Elements des Zeichens, das ich hier als *ch'in* lese) der Form des Zeichens *tsu* nicht entspricht. Das Zeichen *ch'in* findet sich in der Inschrift des Wu-tui in Hsüeh's *K'uan-chih*[3], welche der unseren ähnlich ist. Nach dem *Chou-li* gehört die Beschaffung des Geflügels (*ch'in*) und der Vierfüssler (*shou*), die Unterscheidung der Arten und die Darbietung (der Opfertiere) zu den Obliegenheiten des Tien-chu (Jagdmagiers)[4], die Gebete und Anrufungen zu denen des T'ai-chu (Obermagiers)[5]. Entsprechend lese ich die Bezeichnung des Kessels als *T'ai-chu ch'in-ting*. Dieses Ting diente dazu, Geflügel und Vierfüssler darzubieten. Der Grund, aus dem ich den Kessel *Ch'in-ting* nenne, ist folgender. Im Kommentar zum *Chou-li*, s. v. *P'ao-jen*, heisst es 'Vögel (*niao*), die noch nicht gebrütet, und Vierfüssler (*shou*), die noch nicht gejungt haben, nennt man *ch'in*'[6], und im *Po-hu-t'ung*, 'Was heisst *ch'in*? *Ch'in* ist ein Kollektivbegriff für Vögel (*niao*) und Vierfüssler (*shou*)'[7].

"Hieraus ergibt sich, dass das Zeichen (*ch'in*), wenn es allein gebraucht wird, auswechselbar ist (mit dem umfassenden Begriff für Tiere im allgemeinen).

"Das Fleisch der Vögel und Vierfüssler wird (gewöhnlich) an den Zubereiter (*hsi-jen*) geliefert, der daraus Trockenfleisch (*kan-tou*) herstellt. Hier (d. h. bei der Art von Opfern, für welche das Ting laut Inschrift gebraucht wurde), hat man in diesem Kessel Frischgeschlachtetes im Ahnentempel dargebracht". (Nach Angaben von Herrn Achilles Fang, *Monumenta Serica*).

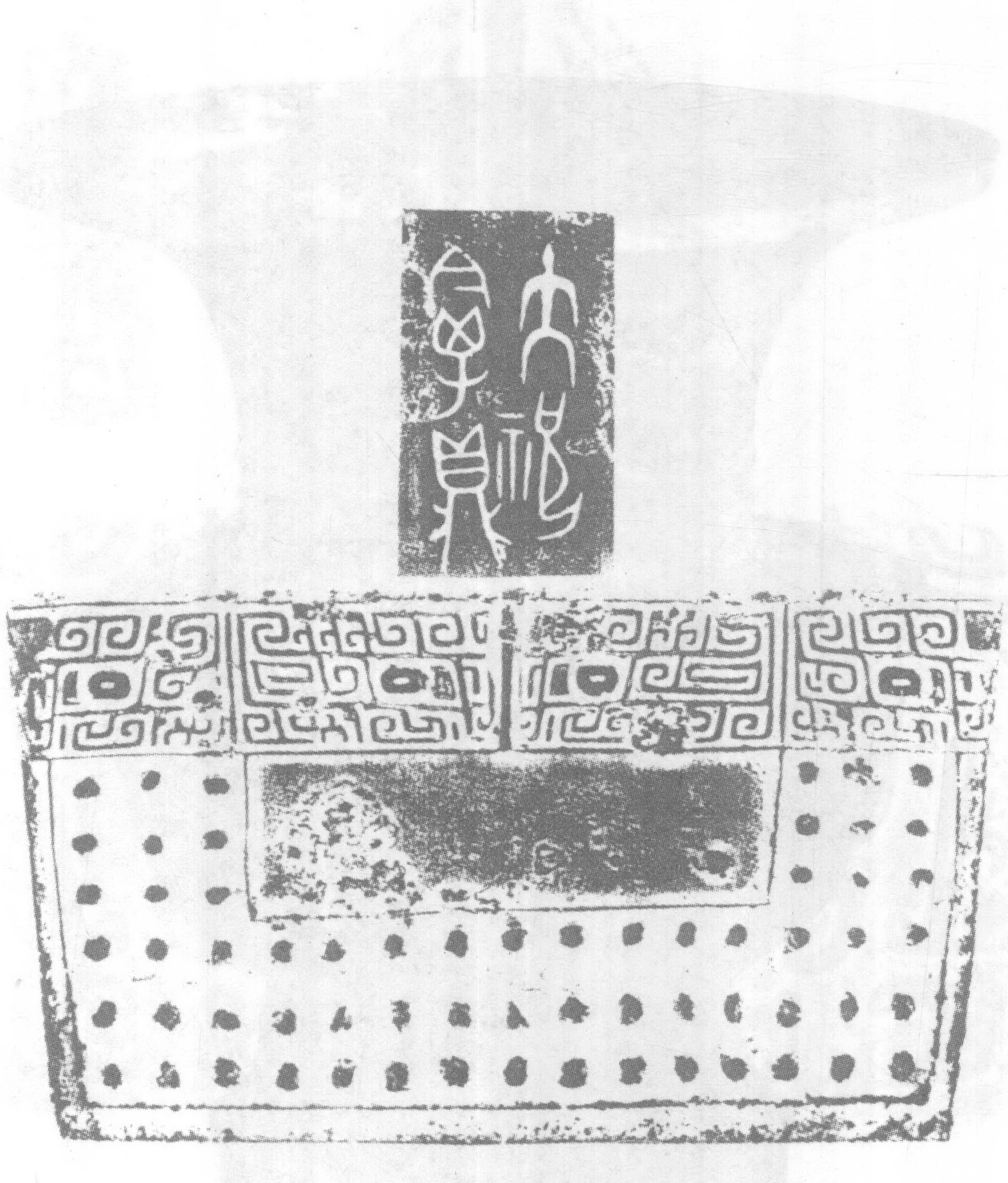


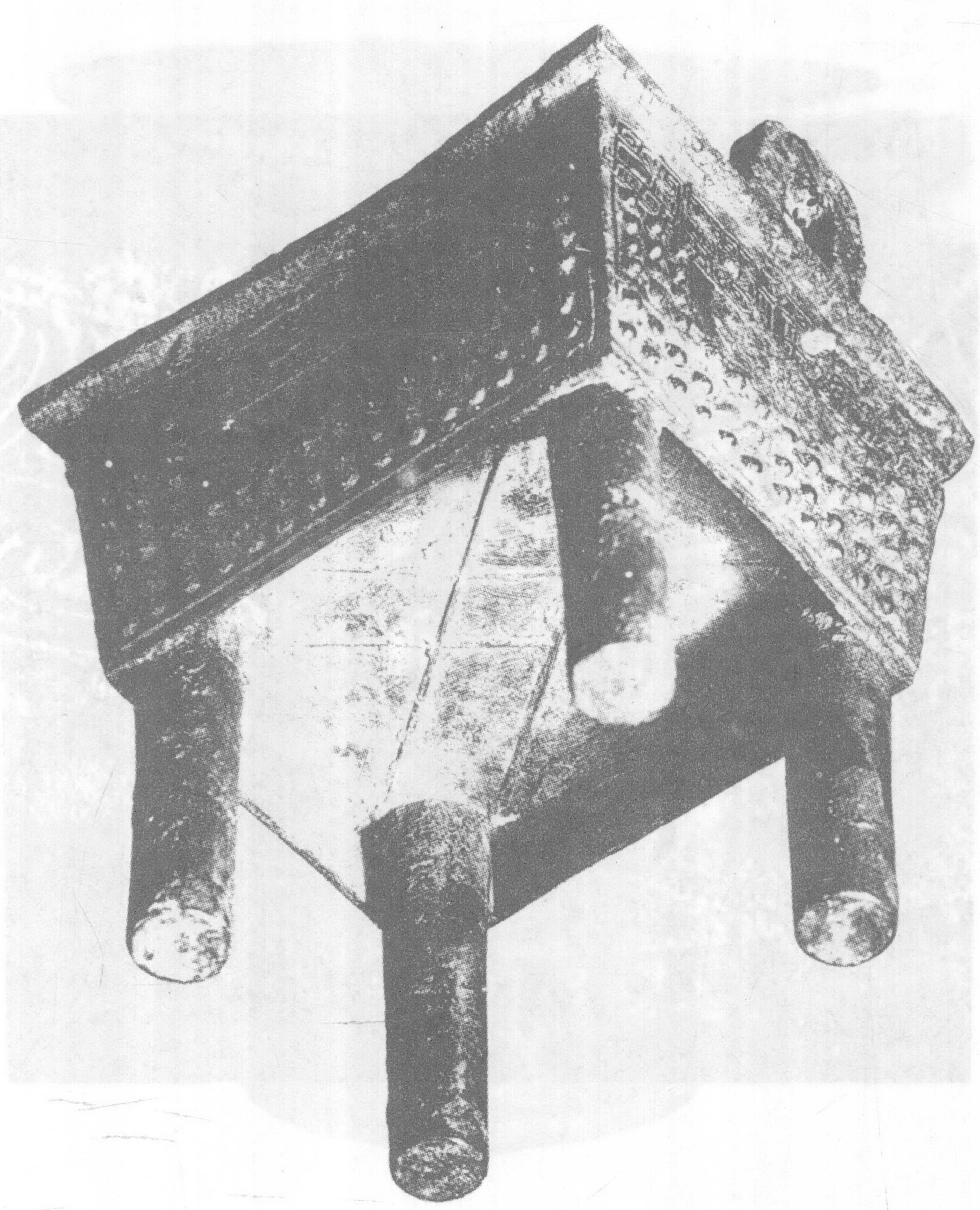


大祝 禽鼎

右太祝鼎銘四字器爲元所藏案禽字向釋作祖罕二字今從吳侃叔釋以祖字不類而禽字見薛氏款識敔敦銘與此同也考周禮屬禽饁獸舍奠祖禰乃甸祝之職而祝號之事太祝領之故曰太祝禽鼎此薦禽獸之鼎也而曰禽鼎者周禮庖人注云凡鳥獸未孕曰禽白虎通曰禽者何鳥獸之總名是散文相通也鳥獸之肉入之腊人則爲乾豆此以新殺者薦之宗廟故實之鼎也

積古齋鐘鼎彝器款識 卷四 五





Tsun 尊 (VII, a-c)

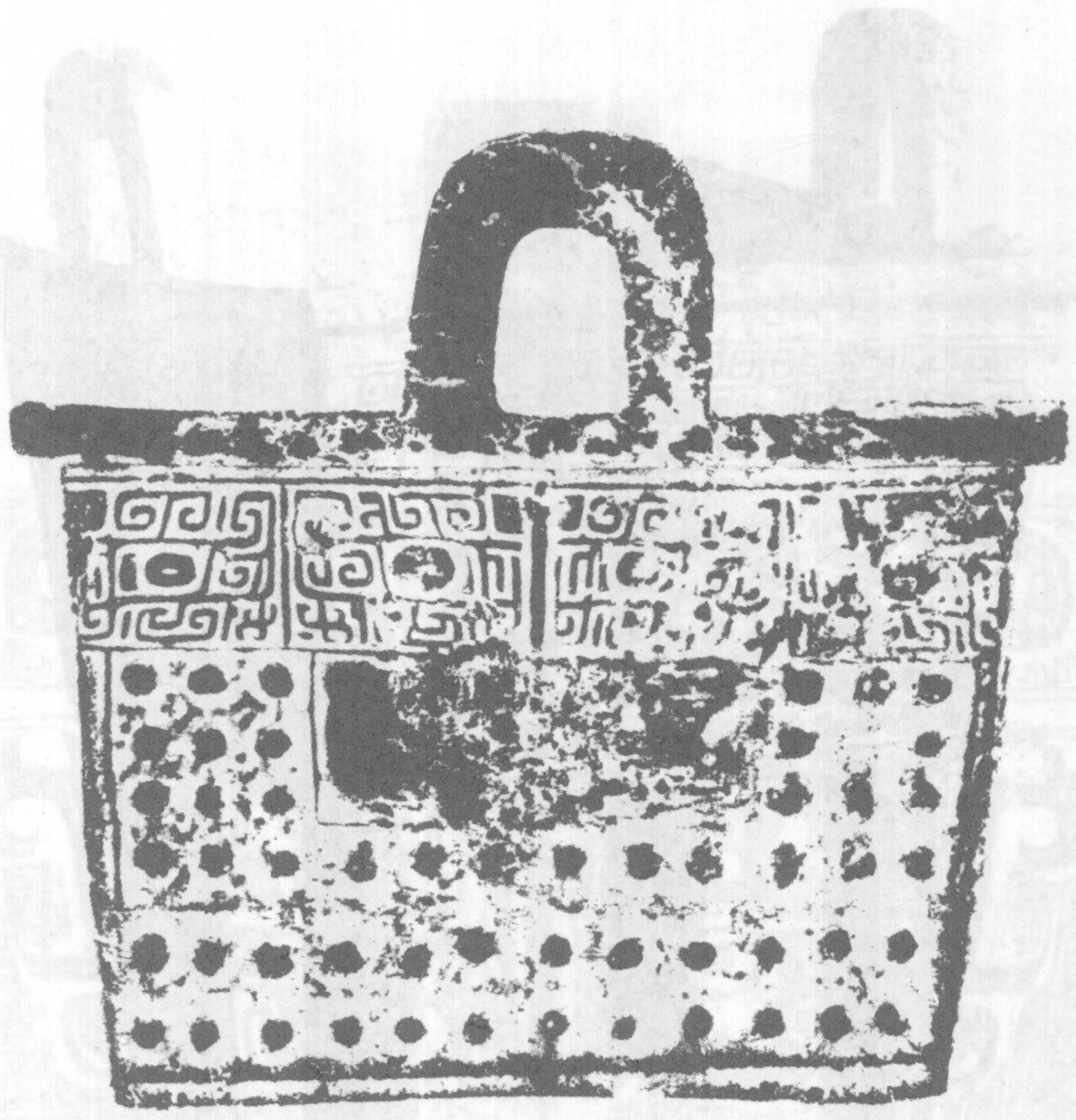
Shang. Neue Ausgrabung aus Anyang. Höhe 24,9 cm; Durchmesser der Öffnung 22,6 cm; des Standringes 13,6 cm; Gewicht 3,63 kg.

Aussen und innen malachitgrüne Verkrustungen, oxidulrote und lasurblaue Stellen. Innen in der Wölbung Lösskrusten.

Kübelartiges Gefäss für Opferwein. Hohler, nach unten konkav ausladender Fuss, auf Standring zum Einsetzen in einen Sockel. Der Gefässboden befindet sich über dem Sehnenornament des Fussansatzes, unmittelbar über dem Gussloch (VII, a). Das eigentliche Gefäss ist stark gewölbt, der obere Abschluss dachartig flach abfallend; aus ihm entwickelt sich, über doppeltem Sehnenornament am Halsansatz, die hohe, trompetenartig ausladende Öffnung.

In der Hauptzone, zwischen zwei Ringleisten, eine Anordnung von dreimal je zwei gegenständigen, locker gefügten, aus drei vertieften Spiralschichten zusammengesetzten Drachen, die so entstehenden drei Masken (VII, c, unten) mit runden Augenbuckeln. Auf der flachen Abdachung drei einschichtige, vertieft ausgeführte Masken mit Reliefsteg (VII, c, Mitte) und drei reliefplastische, gehörnte Fabeltierköpfe (VII, b und c, oben links). Ein Merkzeichen (VII, c) innen in der Mitte des Bodens.

Abgebildet in Huang Chün, *Yeh-chung p'ien-yü*, III, ch. 1, fol. 18; ein verwandtes Stück in *Hsi-ch'ing hsü-chien*, ch. 5, fol. 34.



33





(前有白頁1)

Tsun 尊 (VIII, a-b)

Shang. Neue Ausgrabung aus Anyang. Höhe 32,8 cm; Durchmesser der Öffnung 25,4 cm; des nicht mehr kreisrunden Standringes etwa 16 cm; Gewicht 4,5 kg.

Aussen vielfach reine Bronzefarbe, dazu Stellen grüner und schwarzer Lackpatina. Innen dick verkrustete blaugrüne Auflagerungen. Gefäss für Opferwein. Es besteht aus einem leicht gewölbten Mittelteil, einem etwa gleich hohen, hohlen Fuss auf Standring, einer hohen, kelchartigen Öffnung. Zwischen Fuss und Mittelteil ein vertiefter Streifen mit doppeltem Sehnenornament, ein zweiter, glatter Streifen zwischen Mittelteil und Hals.

Reliefdekor auf Spiralgrund, vertiefte Spiral- und T-Muster in den reliefierten Teilen. Die Erscheinung des Gefässes wird bestimmt von vier starken, gekerbten, über den Gefässrand hinaus vorspringenden Reliefstegen. Rhythmisch unterbrochen von den beiden vertieften Streifen, betonen sie den geschwungenen Umriss auf das kraftvollste.

Um Fuss- und Mittelzone je zwei verwandte, aufgelockerte T'aot'ieh-Masken aus gegenständigen Rüsseldrachen, am Hals vier breite, stehende, spitzbogige Schilde, von zwei Paaren gegenständiger Schlunddrachen getragen. Das T'aot'ieh-Motiv der Schilde, mit dem Spitzbogen als Kinn, muss von oben gelesen werden. Maskenhälften ohne selbständige Bedeutung. Hörner, Augenbezirke, Spitzohren und hängendes Maul erscheinen von unten als isolierte Elemente, von oben betrachtet als zusammengehörige Einheit. Ein Merkzeichen in der Innenseite des Fusses.

Verwandte Stücke bei K. Hamada, *Senoku seishō*, I, 1, Abb. 22; S. Umehara, *Shina kodō seikwa*, I, 1, Tf. XIII; J. M. Plumer, *An Exhibition of Ancient Chinese Ritual Bronzes (loaned by C. T. Loo & Co.)*, Detroit 1940, Tf. XVI (27).









Tsun 尊 (IX, a-b)

Shang. Neue Ausgrabung aus Anyang. Höhe 32,6 cm; Durchmesser der Öffnung 21,2 cm; des Standringes 12,9 cm; Gewicht 3,13 kg.

Aussen und innen hellgrüne Lackpatina mit malachitgrünen Stellen, Lösskrusten.

Kelchartiges Weingefäss, in Aufbau, Dekor und Präzision des Formschnitts der Bronze VIII nah verwandt. Die Reliefstege enden unterhalb der Spitzbogenschilde.

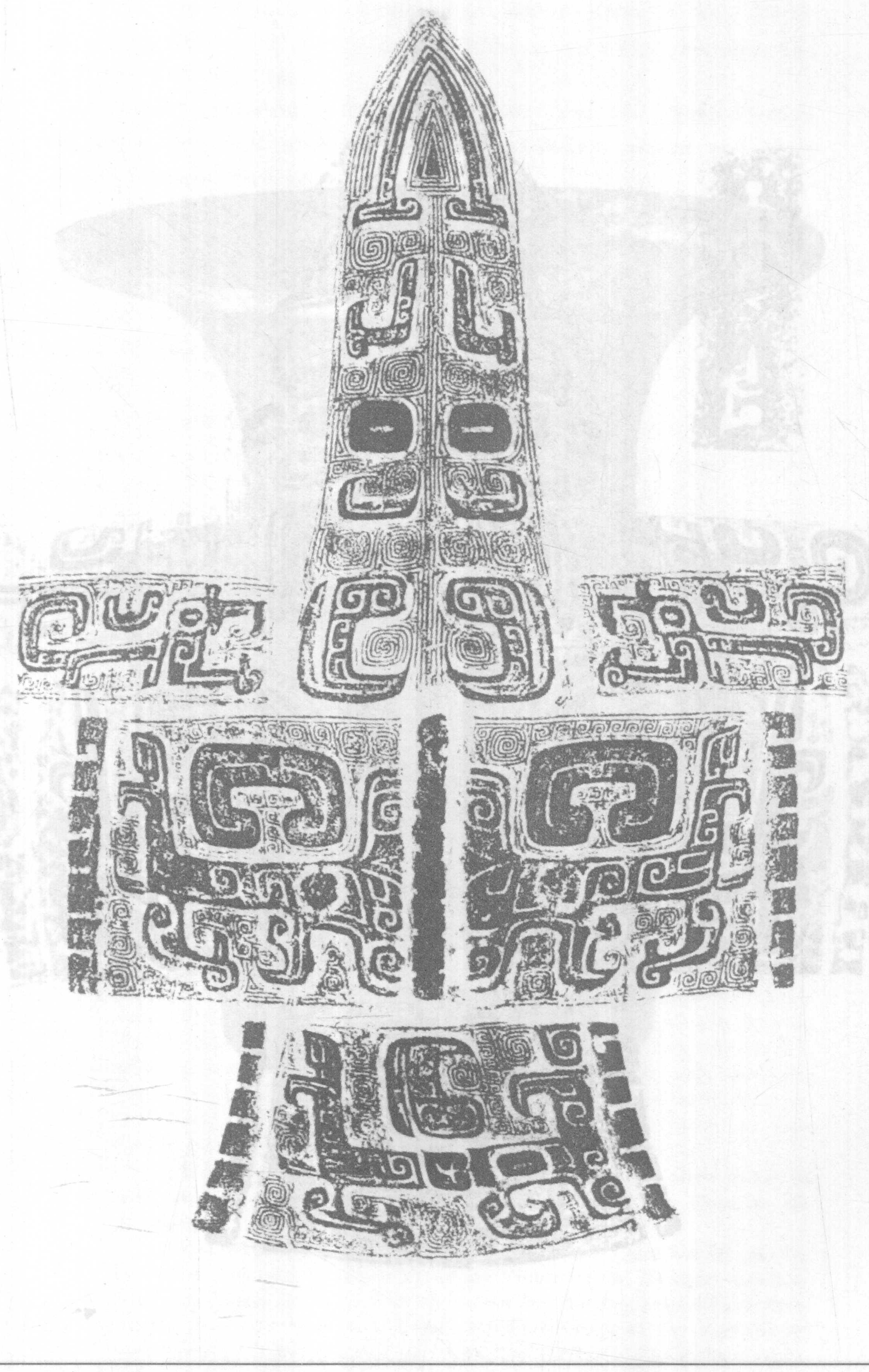
I 彝 (X, a-b)

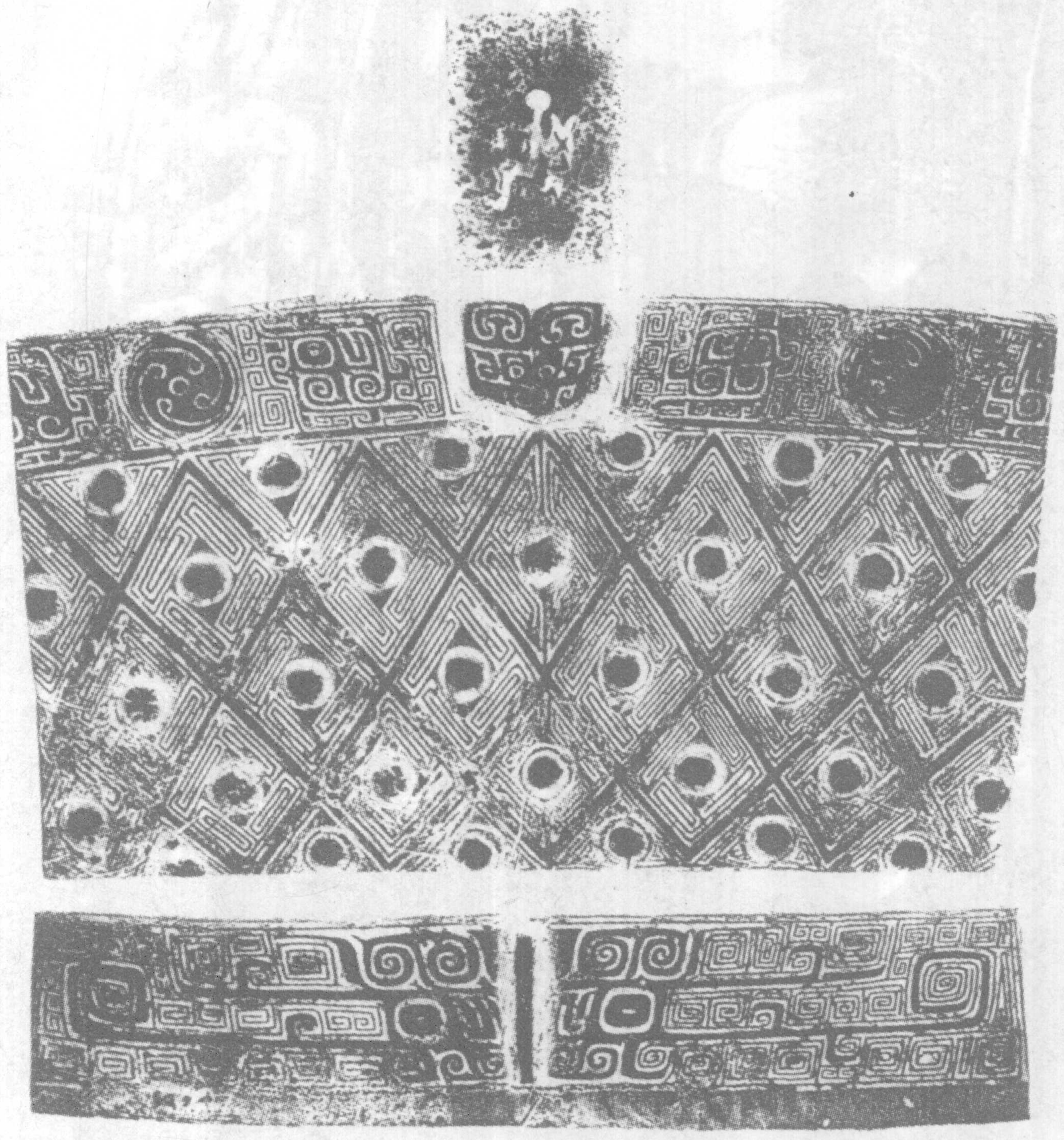
Shang. Neue Ausgrabung aus Anyang. Höhe 16,8 cm; Durchmesser der Öffnung 25,5 cm; des Fussringes am unteren Rand 17 cm; Gewicht 3 kg.

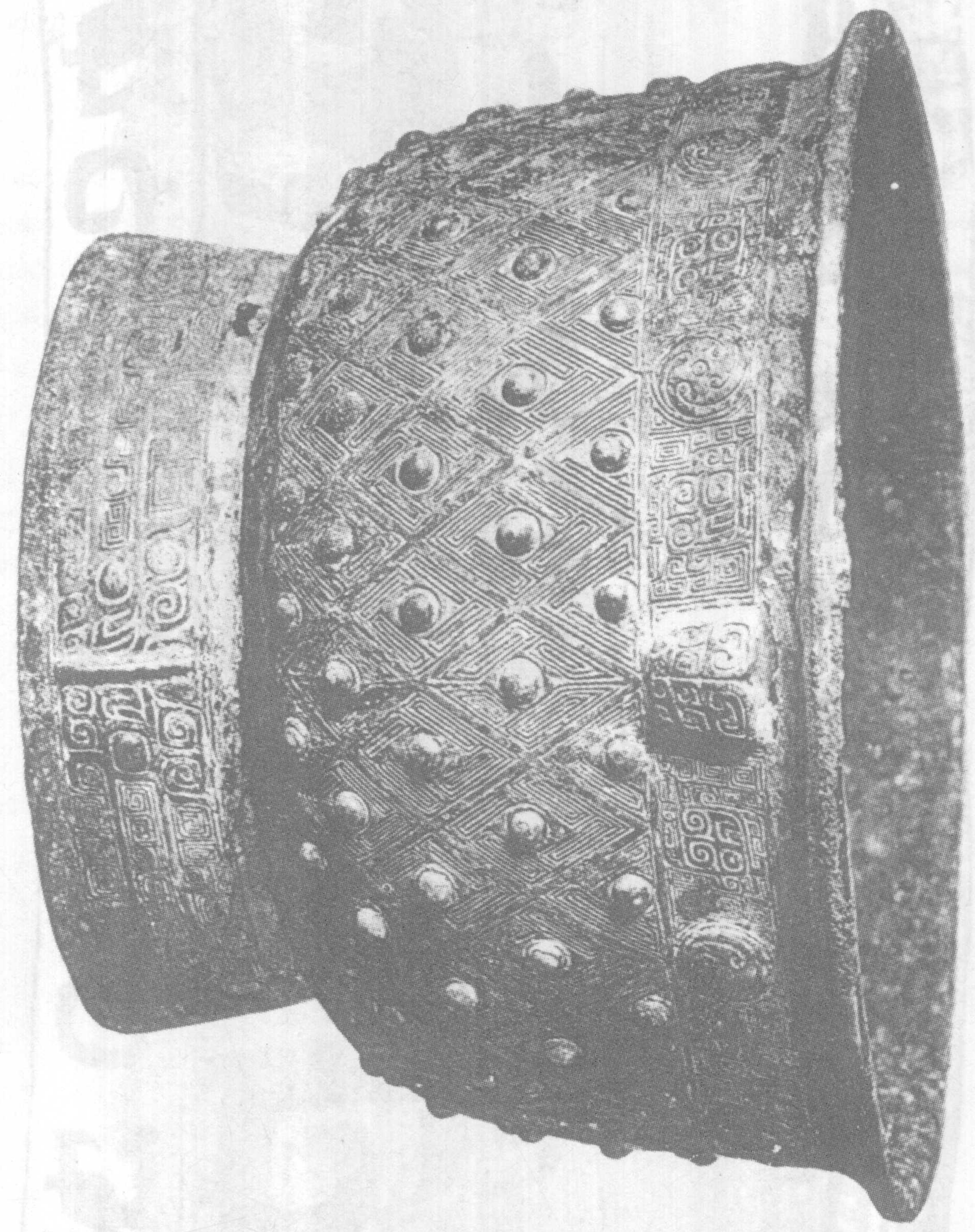
Malachitgrüne Patina, der Ornamentgrund vielfach bronzefarben, Stellen blauen Kupferlasurs. Am Rande der Öffnung verkrustete Auflagerungen. Innen leuchtender Malachitüberzug mit Stellen türkisgrüner Lackpatina.

Gefäss für Kornopfer. Konischer Fussring mit drei Reliefstegen und drei gegen die Stege angeordneten, in drei Spiralschichten aufgelösten T'aot'ieh-Masken. Der Dekor der Hauptzone besteht aus einer Anordnung von drei Schichten diagonal gestellter, kettenartig umlaufender, vertiefter Mäander-Rauten mit zentralen Buckeln. Die Zwickel enthalten halbierte Rauten, unter Einschluss der Buckel. Unter dem vorspringenden Rand ein schmales Ornamentband mit zwölf in Spiralen aufgelösten Tiermotiven, neun leich erhöhten Wirbelkreisen und drei plastischen Masken mit vertieftem Spiraldekor. Ein Merkzeichen innen in der Mitte des Bodens.

Abgebildet in Huang Chün, *Yeh-chung p'ien-yü*, III, ch. 1, fol. 25.







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Kuei 簋 (XI, a-d)

Anfang Chou. Sehr alte Ausgrabung. Höhe 15,8 cm; Durchmesser der Öffnung 23 cm; des Fussringes am unteren Rand 18,5 cm; Breite, über die Henkel gemessen, 31 cm; Gewicht 4,13 kg.

Glänzend glatte, seit langem behandelte Patina, dunkelgrün, mit hellgrünen und dunkelroten Stellen.

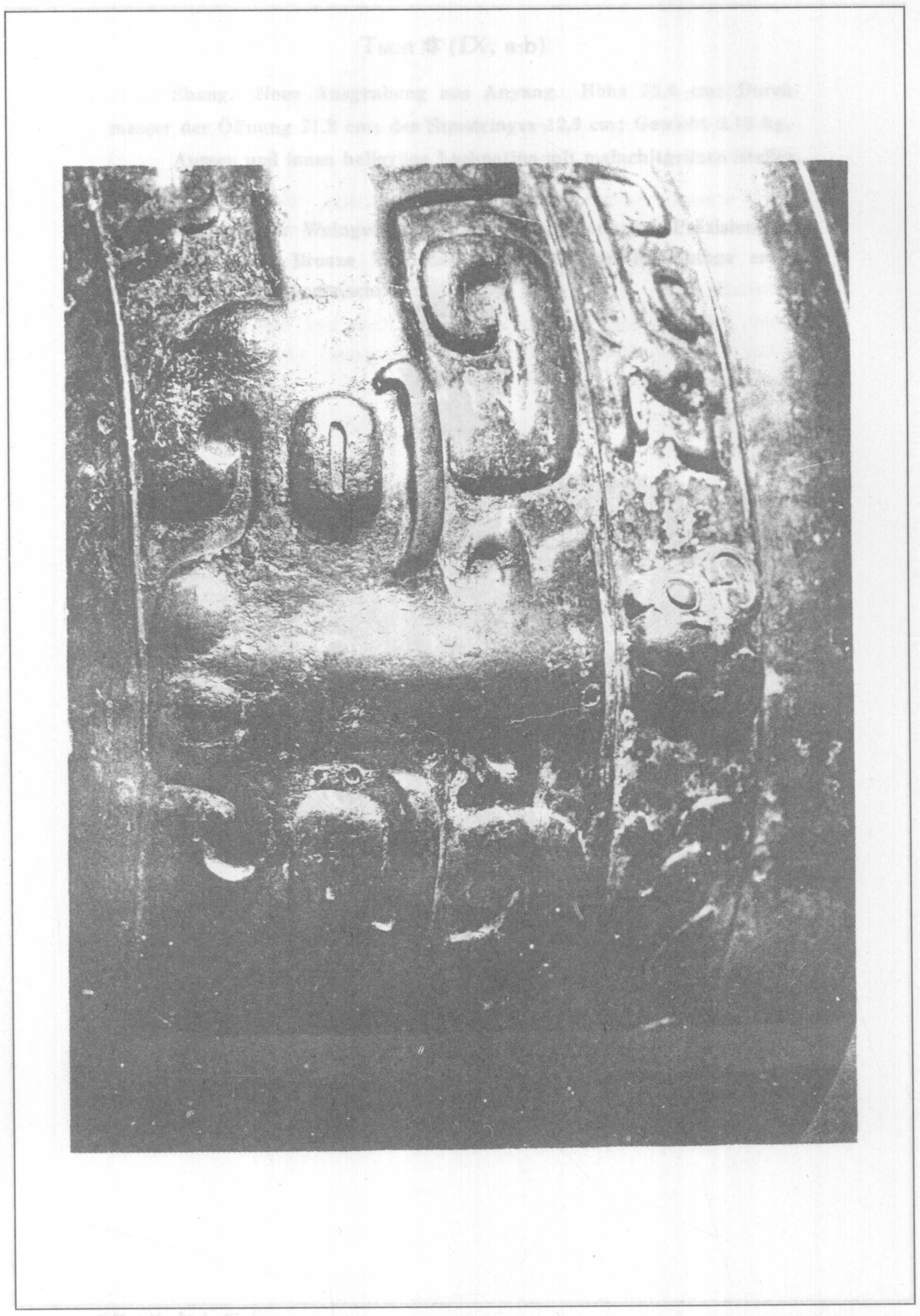
Breites, kesselartiges Speiseopfergefäss mit konischem Fussring und zwei gerundeten Henkeln. Der Rumpf leicht gewölbt, oben eingezogen, mit kräftigem Rand über der Hohlkehle. Reliefdekor in sogenanntem *Yang-wen* 陽文, ohne Spiralgrund, ohne vertiefte Ornamente in den reliefierten Teilen und ohne trennende Reliefstege.

Träger des ornamentalen Gedankens ist der Rumpf, mit zwei beherrschenden Masken in breitem, weich gerundetem Flachrelief, dessen monumentale Wirkung durch Lichtreflexe erhöht wird (XI, a). Die Masken, flankiert von je zwei kopfstehenden Schlunddrachen, bestehen aus je zwei gegenständigen Drachen, deren Rüssel sich zur Nase des T'aot'ieh vereinen. Die vorstehenden Augäpfel oval mit schlitzartig vertieften Pupillen, die Augenbrauen und Hörner von kraftvollstem Schnitt. Die Maske als Ganzes ist fern von aller goldschmiedmässigen Präzision, sie atmet Grösse und Schrecken (XI, b).

Auf jeder Hälfte des Fussringes erscheinen vier gegenständige, auf ein kreuzartiges Mittelornament angeordnete Schlunddrachen. Sie wiederholen sich beinahe wörtlich im oben abschliessenden Ornamentband, mit einer kleinen, reliefierten Tiermaske in der Mitte (XI, c). Am Henkelansatz eine Tiermaske, unten am Henkel eine bartartige Verlängerung (XI, a, d). Ein Merkzeichen innen in der Mitte des Bodens (XI, d).

Abgebildet in Huang Chün, *Tsun-ku-chai so-chien chi-chin-t'u*, ch. 1, fol. 47. Vgl. auch *Yeh-chung p'ien-yü*, III, ch. 1, fol. 41.





Kuei 簋 (XII, XIII, a-e)

Übergangszeit vom zweiten zum dritten Stil der Chou-Dynastie. Neue Ausgrabung aus der Gegend von Lin-tzu 臨甾 in Shantung. Die Bronzen bilden ein Paar aus einer Reihe von mehreren Stücken. Ein drittes Stück im amerikanischen Kunsthandel, weitere zwei Stücke angeblich noch in Lin-tzu.

Ganze Höhe, einschliesslich Sockel und Deckel, 34 cm; Höhe des Sockels 12 cm; Breite des Sockels 24 cm; ganze Breite, einschliesslich der Handgriffe, 45 cm; Gewicht 12,25 kg.

Die Patina der beiden Stücke ist nicht ganz gleichartig, vorherrschend seegrün, mit türkisgrünen, dunkler grünen und blauen Stellen. Innen am Boden der Bronze XII grosse, pastellblaue Stelle als Folge einer Einlage.

Speiseopfergefässe, mit Sockel in einem Stück gegossen, angegossene Handgriffe. Deckel mit einem in Stabwerk aufgelösten, achtteiligen Standring als Gefässkrone (XII, e). Wellenbandornament auf Sockel, Kessel und Abfall des Deckels (XII, d). Auf der flachen Oberseite des Deckels Band mit linear aufgelöstem, verschlungenem Tierornament (XII, e).

Die S-förmigen Handriffe haben die Gestalt von glatten, aufbäumenden Schlangenleibern mit Drachenköpfen, die Köpfe vorstehende Insektenaugen, hauerartige Fangzähne, einen Kamm und geschweifte Hörner. An der brustartigen Ausbiegung des Leibes kriecht, mit geringeltem Schwanz, ein zweibeiniges Mischwesen nach oben, halb Larve, halb Raubtier, bei Bronze XII mit einem Rautenstern auf der Stirn (XII, c). Geringfügige Unterschiede in der Behandlung dekorativer Einzelheiten deuten an, dass die Gussformen für jedes Gerät neu hergestellt wurden.

Aufbau und Schmuck der Bronzen sind gleich aufschlussreich, die Verbindung der kubischen und der sphärischen Form, der einende Rhythmus des dreifachen Wellenbandes, über den geschlossenen Formen die offene, nach aussen weisende Krone. Doch erst die Handgriffe schaffen eine Beziehung zum Raum und verleihen dem Gerät seine hieratische Würde. Diese fauchend hervorfahrenden Drachenschlangen sind ein majestätischer Ausdruck jenes mythisch befangenen Glaubens an die allwaltende Naturkraft, deren Beschwörung der letzte Sinn eines jeden heidnischen Opfers bleibt.

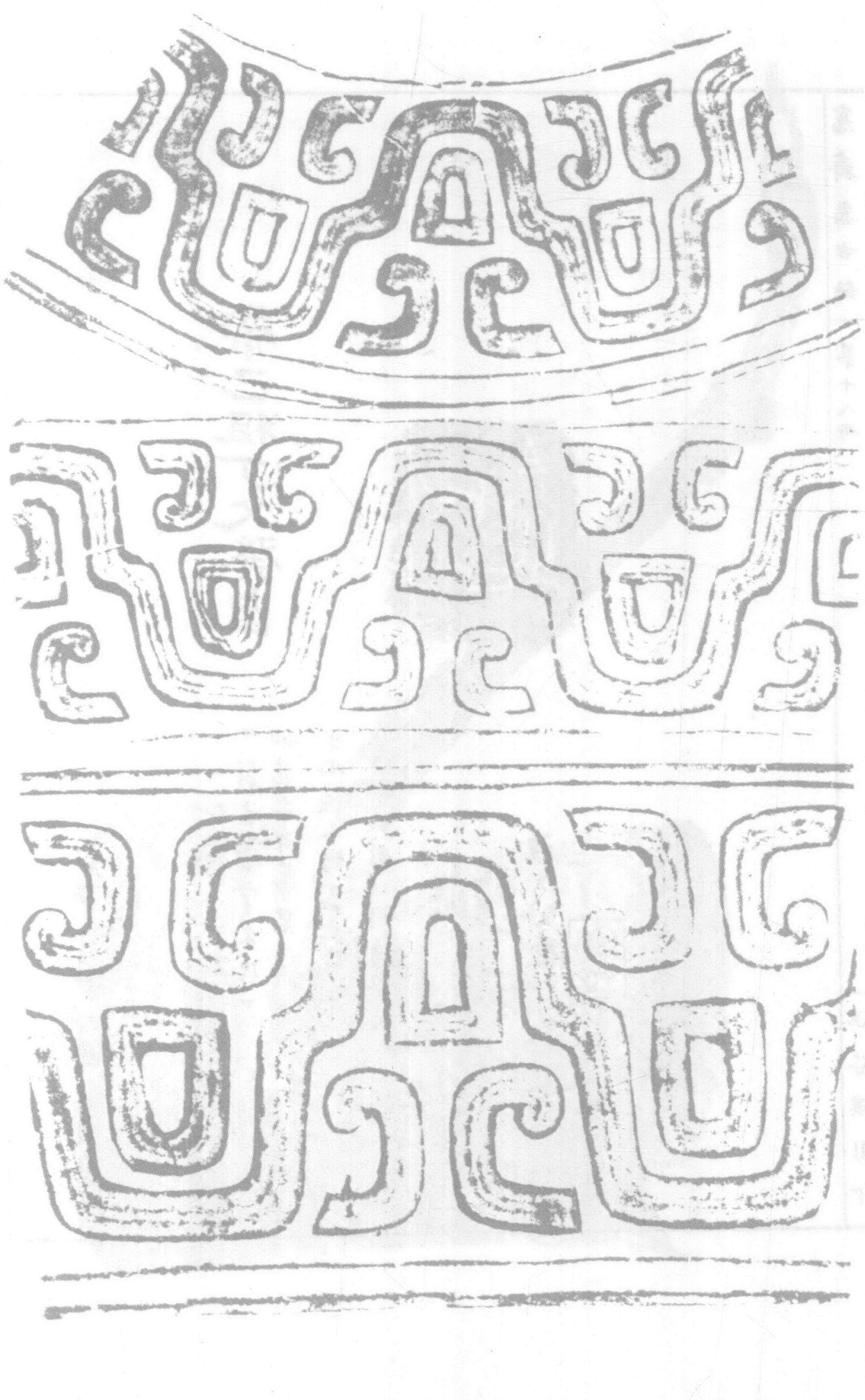
Literatur: M. Loehr, *Ein Sockel-Kuei aus der Zeit des K'ungtse, Notes on Early Bronzes* III, *Monumenta Serica* VII, 1942, pp. 227-34.

Vgl. ferner N. Palmgren, *Yinstil-Studien, Ostasiatische Zeitschrift*, N. F. XII, 1936, Abb. 32,33, Tf. XVII, XVIII; L. C. S. Sickman, *Early Chinese Art*, Newton 1938, 0-106; Ausstellung New York 1938, Nr. 144.











Yu 卣 (XIV, a-c)

Anfang Chou. Alte Ausgrabung. Ganze Höhe 32,5 cm; Durchmesser der Öffnung 10,5 × 14 cm; an der weitesten Stelle des Rumpfes 19 × 23,4 cm; Gewicht 5,33 kg.

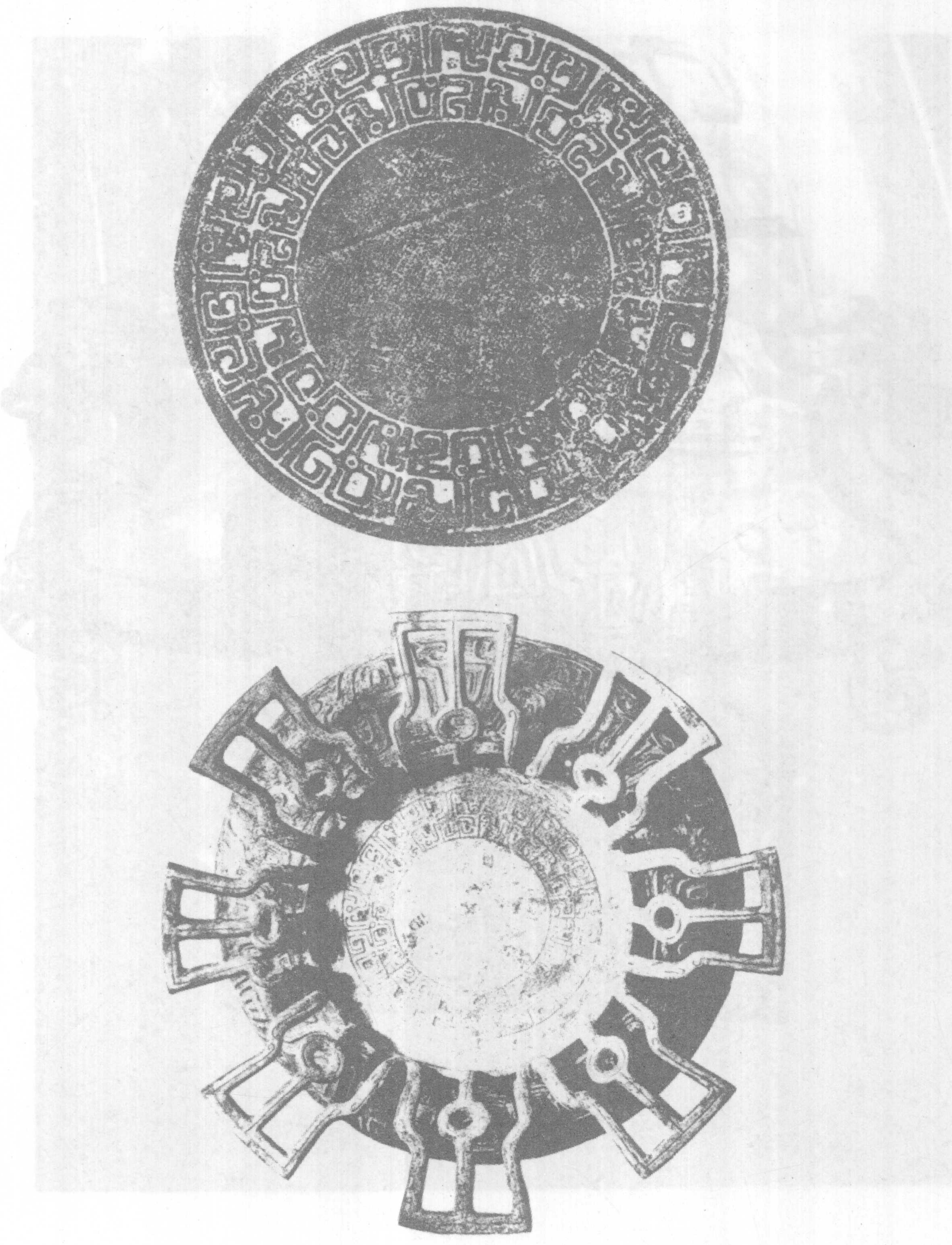
Glatte, glänzende Handpatina, aussen dunkle und hellere Malachit-Töne, rotbraune und hellblaue Flecken, innen Bronzefarbe mit lasurblauen Stellen.

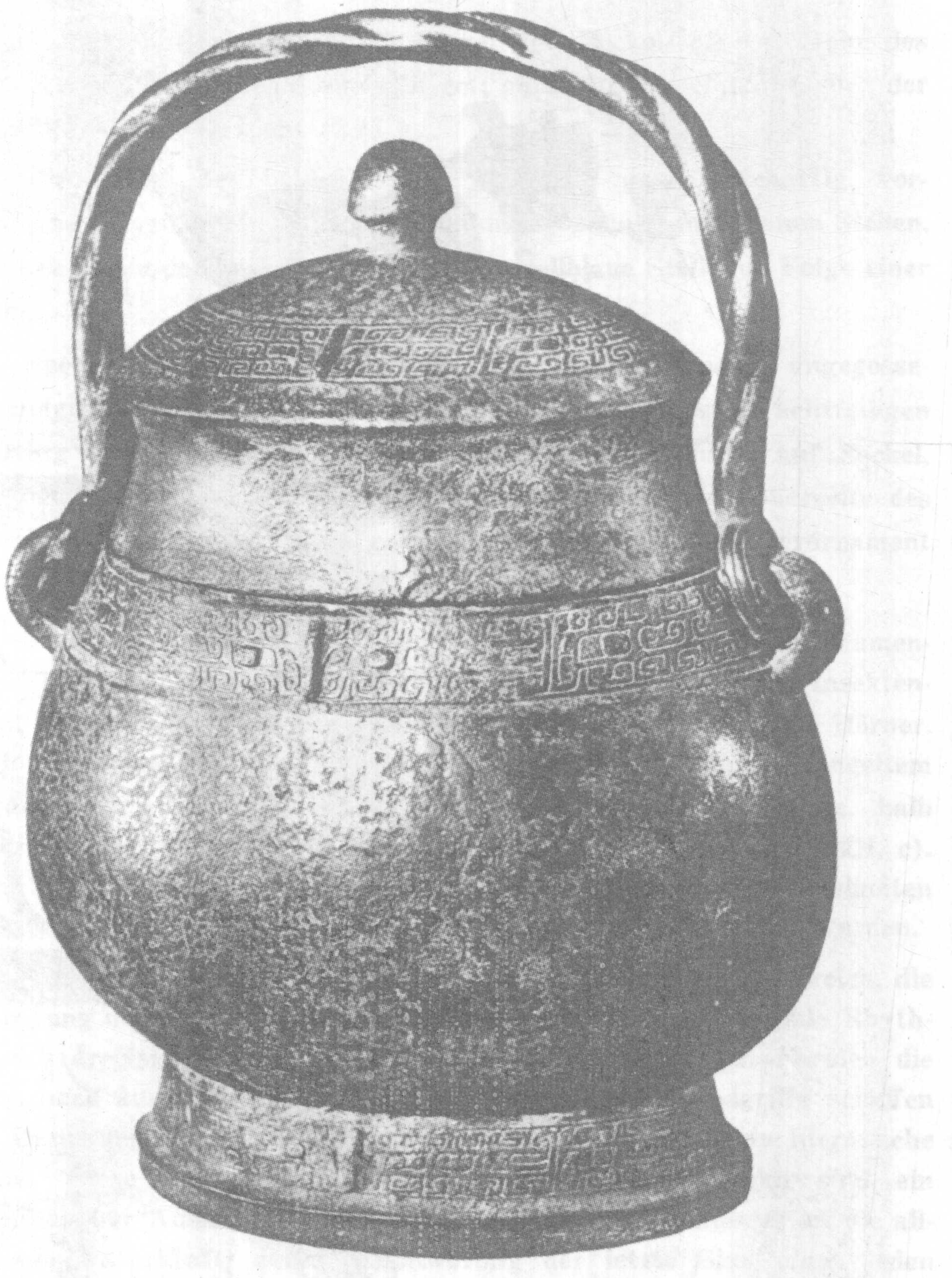
Weinkübel mit beweglichem Bügel und Deckel, von ovalem Querschnitt und S-förmigem Umriss, mit konischem Fuss und scharf abgesetztem Standring zum Einsetzen in Sockel. Der Hals mit Hohlkehle ist als Teil des Deckels gestaltet. Der schnurartig gedrehte Bügel schwingt um Ösen (XIV, b). Zapfen an den Bügelringen (XIV, c-3) verhindern ein Anschlagen des Bügels an den Rumpf. Auf dem Ornamentband des Deckels (XIV, c-5), dem Halsstreifen (XIV, c-6) und um den Fuss (XIV, c-7) gleichartiger, dreischichtig aufgelöster T'aot'ieh-Dekor mit Augen und Reliefstegen. Am Deckelknopf abgegriffener, vertiefter Dekor (XIV, c-4).

Inschrift innen im Boden (XIV, c-1), im Deckel wiederholt (XIV, c-2). Im *K'o-chai chi-ku-lu,* ts'ê XVIII, fol. 17a, gibt Wu Ta-ch'eng den Versuch einer Deutung (XIV, a). Danach handelt es sich um ein Piktogramm mit der Darstellung einer menschlichen Gestalt, welche ein Banner hält. Als ganze Lesung schlägt Wu vor: *Ti Chi Tsu Ting Fu Kuei* 帝己祖丁父癸. Anschliessend bringt Wu noch eine kurze Erörterung der Bedeutung des Zeichen ▼, welches er als *ti* 帝 deutet; fol. 17b bildet die identische Inschrift des Deckels ab.

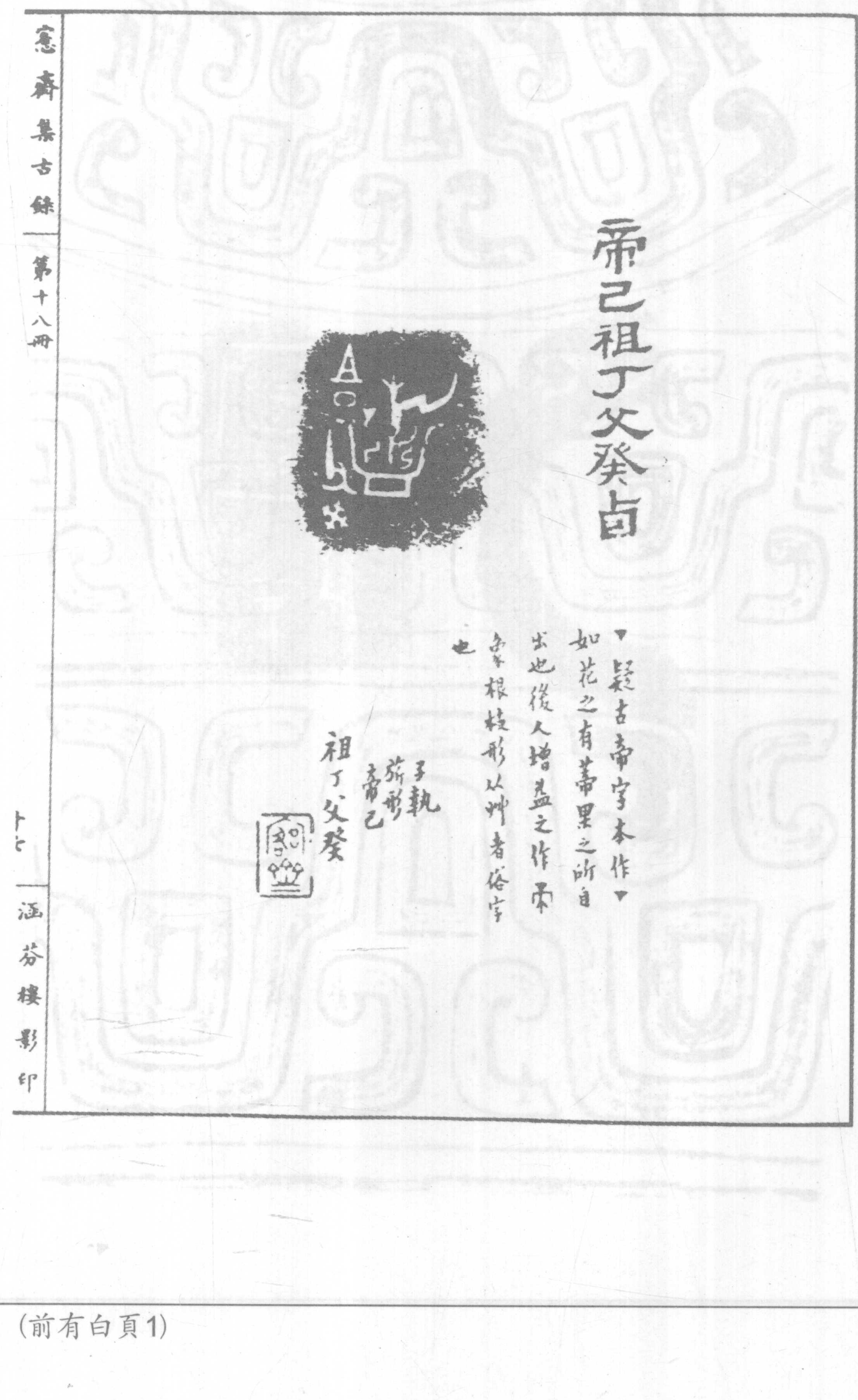
Aus der Sammlung Wu Ta-ch'eng ging der Kübel über in die Sammlung Yen-hung-ko 延鴻閣 des Prinzen (Pei-tzu 貝子) P'u-lun 溥倫.

Abgebildet in Shang Ch'eng-tso, *Shih-êrh-chia chi-chin t'u-lu,* 章 14b, 15a; B. Karlgren, *New Studies in Chinese Bronzes, The Museum of Far Eastern Antiquities, Bulletin* No. 9, 1937, Tf. XLIII (512); Jung Keng, *Shang Chou i-ch'i t'ung-k'ao,* II, Abb. 617. Die Inschrift auch in Lo Chen-yü, *Yin-wen-ts'un,* ch. 1, fol. 39b; *San-tai chi-chin-wen-ts'un,* ch. 13, fol. 23b; Liu T'i-chih, *Hsiao-chiao-ching-ko chin-wen t'a-pen,* ch. 4, fol. 44 b.





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愙齋集古錄 第十八册

帝己祖丁父癸卣

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子執旂形 帝己 祖丁父癸

十七

涵芬樓影印

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Shao 勺 (XV, a-d)

Shang. Neue Ausgrabung aus Anyang. Höhe der Laffe 16,5 cm; Durchmesser der Öffnung 12,5 cm; des Fusses am unteren Rand 13,7 cm; Tiefe der Laffe bis zum konkaven Boden 12,5 cm; ganze Länge, in der Projektion über Stiel und Laffe gemessen, 35,5 cm; Gewicht 2,25 kg.

Unberührte Patina, die Laffe aussen malachitgrün mit Stellen türkisgrüner Lackpatina, mit oxidulroten Flecken und verkrusteten Lössresten. Innen dick verkrustete, malachitgrüne Auflagerungen mit patinierten Lössresten und lasurblauen Stellen. Der Stiel ist von einer hautdünnen, türkisgrünen Lackpatina überzogen.

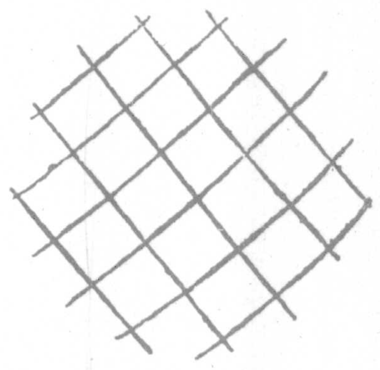


Abb. 8

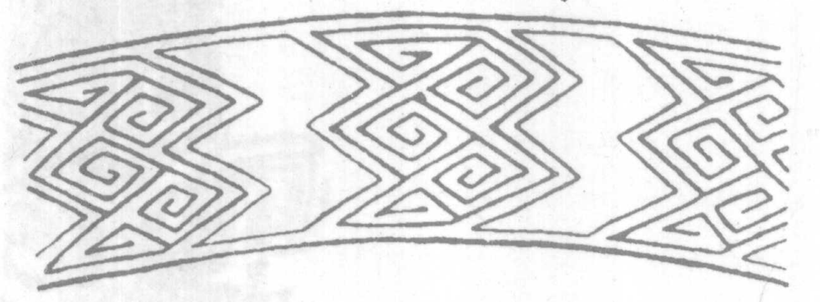
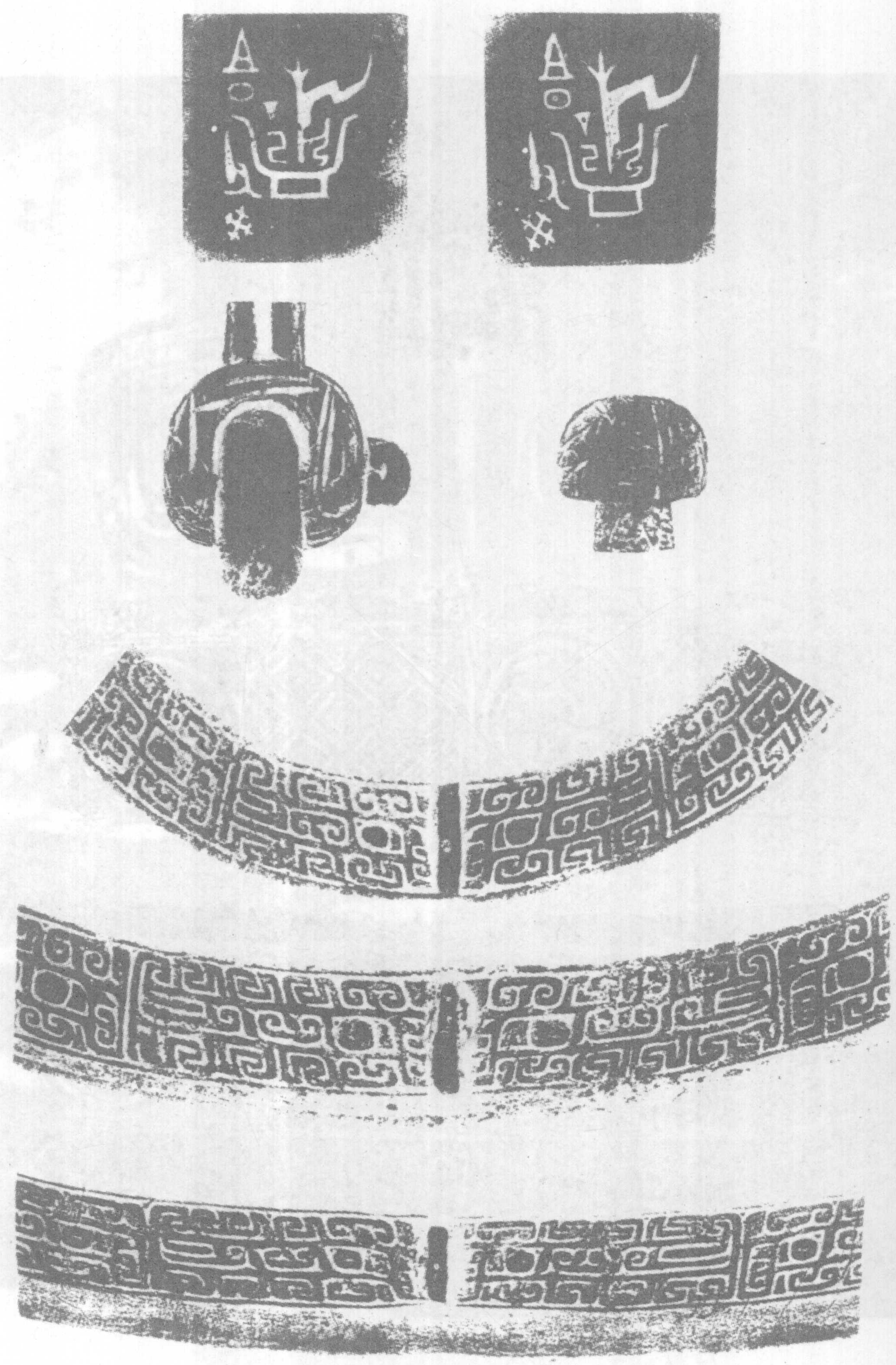


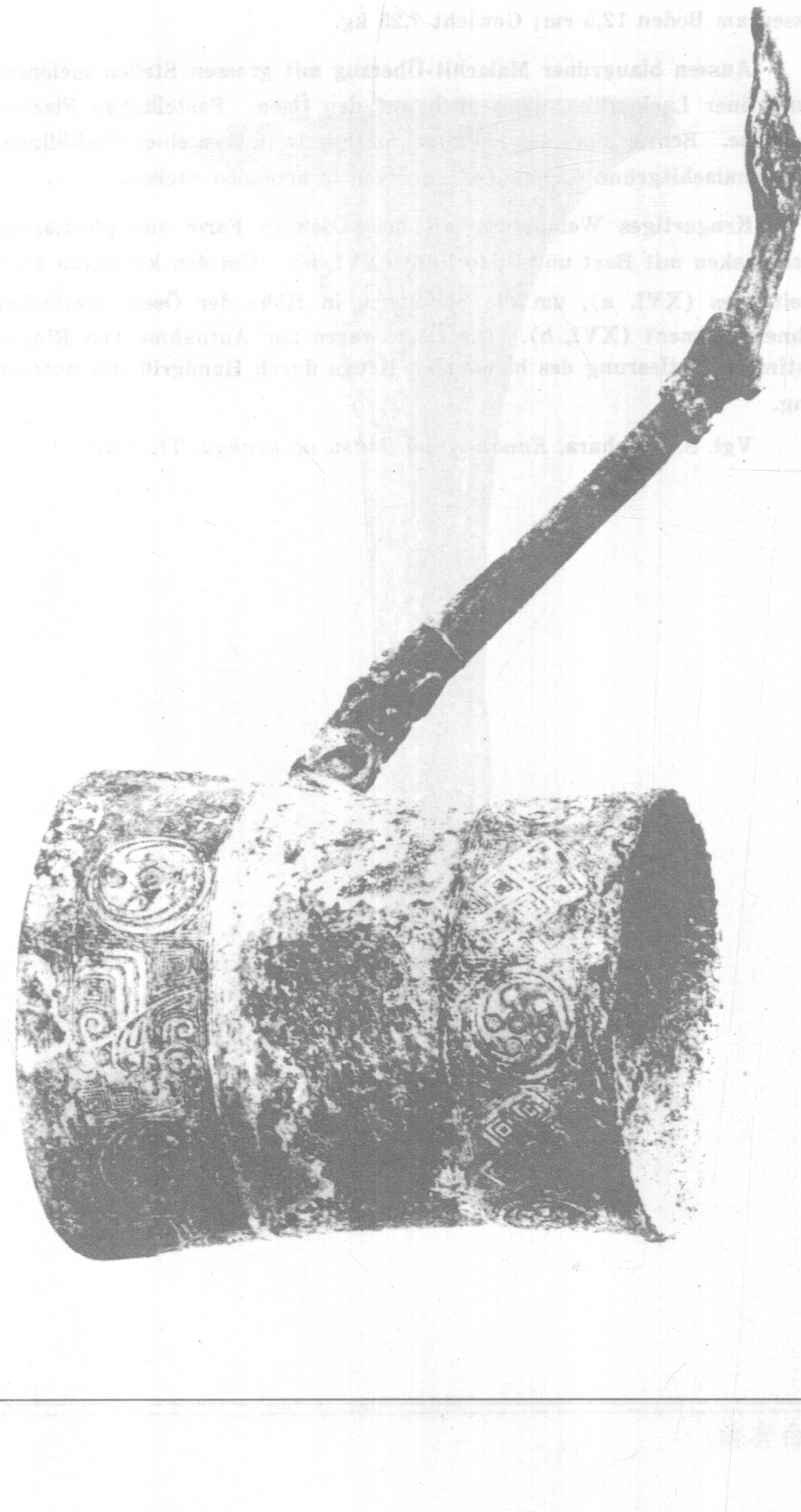
Abb. 9

Schöpfkelle mit bambusförmiger Laffe, diese mit vertieftem, linearem Dekor. Die Aussenfläche der Laffe ist in drei Zonen unterteilt (XV, b). In der oberen Zone je fünf Quadrate und fünf liegende Rechtecke abwechselnd geordnet (XV, d, Mitte), die Quadrate mit Wirbelkreisen, die Rechtecke mit diagonal gestelltem, fischartigem Rautenkomplex; Mäander-Spiralen in den Zwickeln. Die mittlere Zone ist glatt. Auf dem unteren Ornamentband (XV, d, unten), d. h. auf der Aussenseite des hohlen Fusses, vier Quadrate der beschriebenen Art und sechs liegende Rechtecke mit stilisierten Fabelvögeln auf Spiralgrund. Auf der Unterseite des Bodens Gussnähte (Abb. 8). Der geometrische Dekor der Laffe erinnert an gekerbte Schmuckformen der weissen Anyang-Ware (Abb. 9).

Der hohle, angegossene, leicht S-förmig gebogene Stiel (XV, b-c) hat einen schneckenartigen, seitlich ausladenden Griff mit vertieftem Dekor, am Stielansatz eine T'ao-t'ieh-Maske, am Griffansatz einen Tigerkopf, beide in Flachrelief. Die beiden gegenständigen Masken sind von der glatten Hauptzone des Stiels durch Sehnenornamente getrennt. Ein Merkzeichen innen im Boden (XV, d, oben).

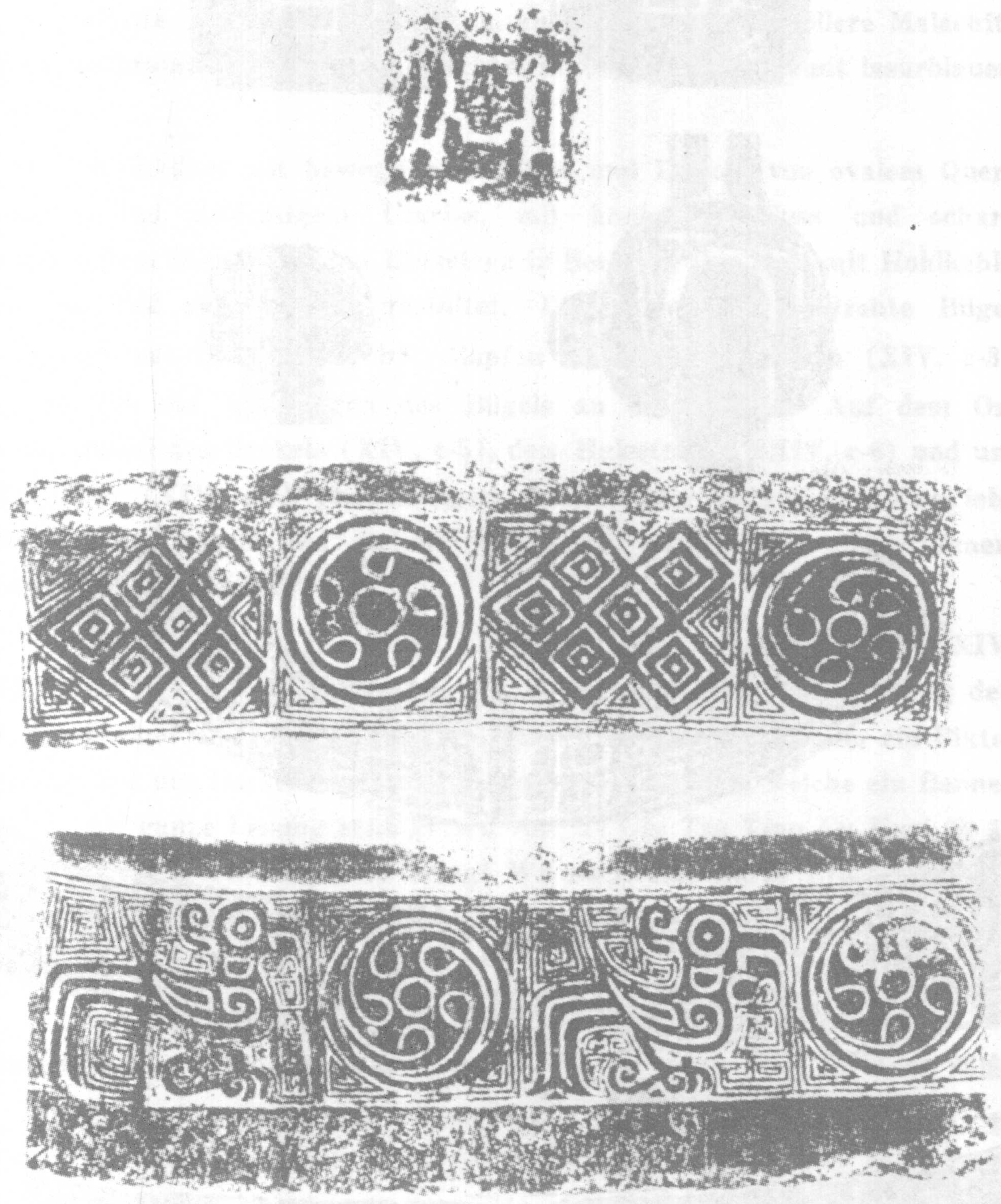
Vgl. S. Umehara, *Yinkyō shutsudo hakushoku doki no kenkyū*, Tf. XXIV, Abb. 15 (= unserer Abb. 9).

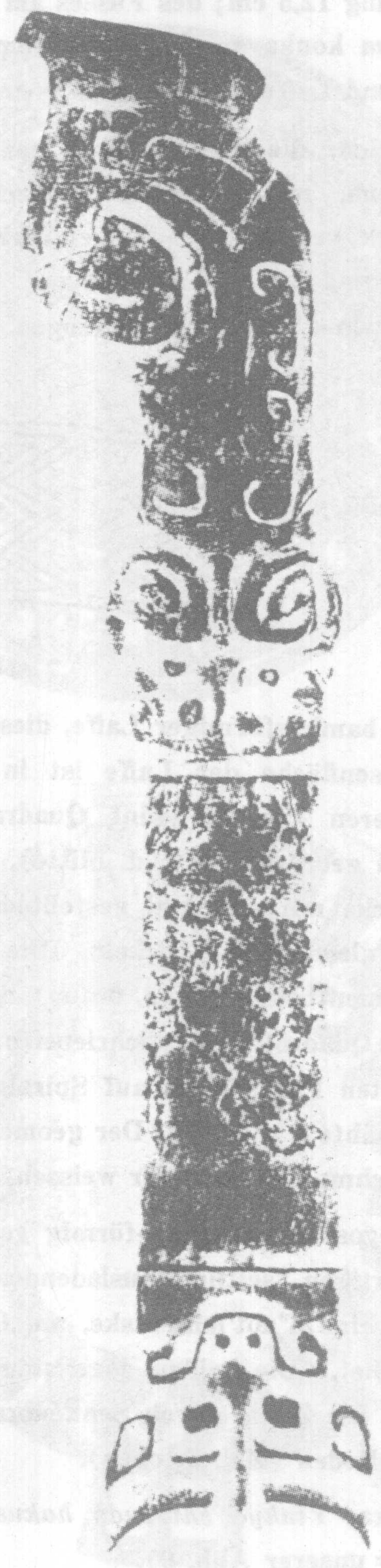


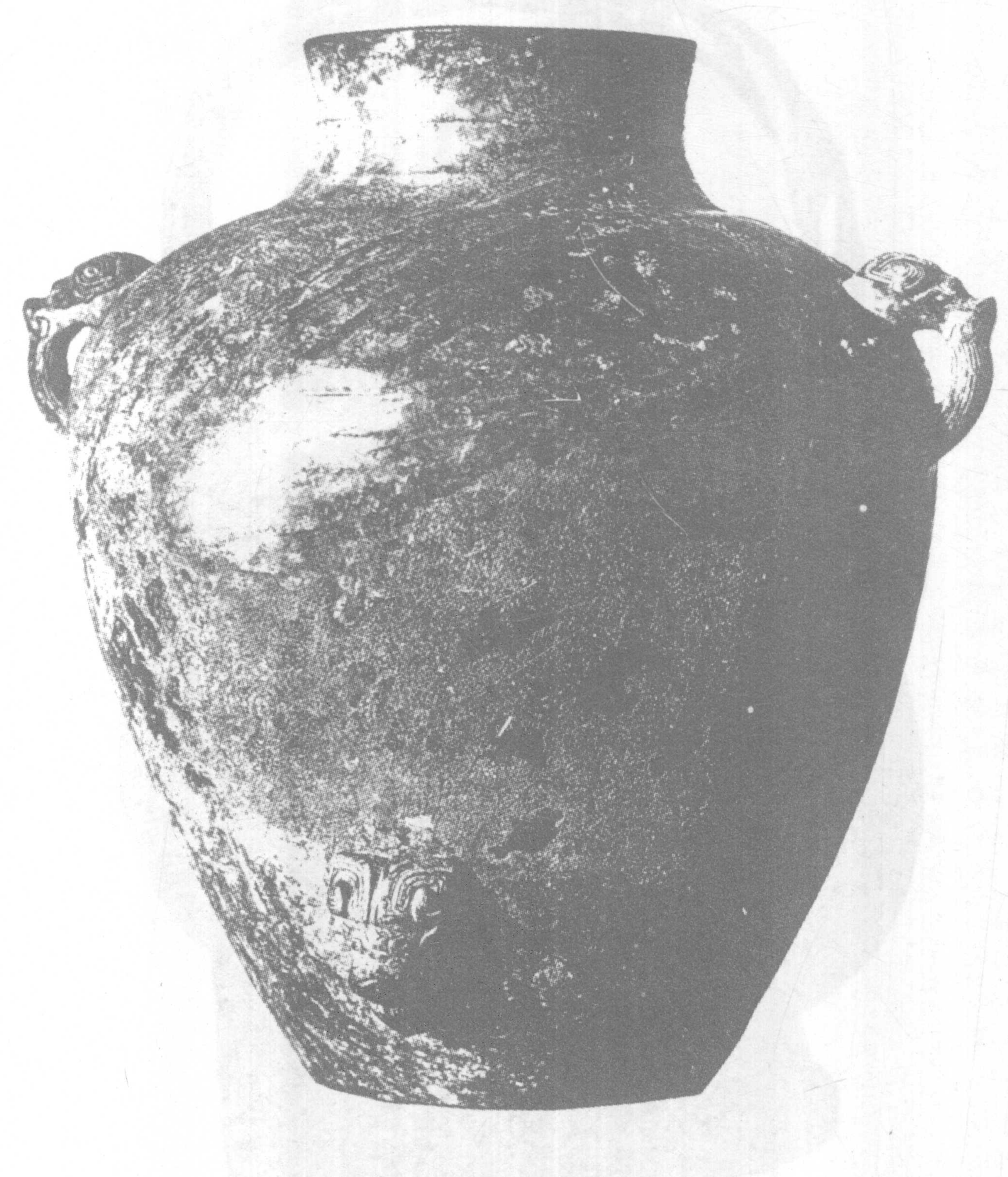




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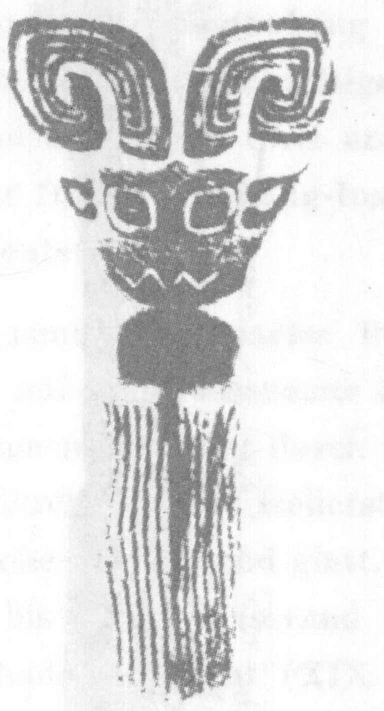
Lei 櫑 (XVI, a-c)

Shang. Neue Ausgrabung aus Anyang. Höhe 33 cm; Durchmesser der Öffnung 12,1 cm; an der weitesten Stelle des Rumpfes 27 cm; aussen am Boden 12,5 cm; Gewicht 7,25 kg.

Aussen blaugrüner Malachit-Überzug mit grossen Stellen melonenhautgrüner Lackpatina, diese auch auf den Ösen. Pastellblaue Flecken am Halse. Schräg über den Schultern patinierte Spuren einer Umhüllung. Innen malachitgrüne Krusten mit grossen lasurblauen Stellen.

Krugartiges Weingefäss mit drei Ösen in Form von plastischen Bockmasken mit Bart und Stirnraute (XVI, b). Um den konkaven Hals zweifaches (XVI, a), um die Schultern, in Höhe der Ösen, dreifaches Sehnenornament (XVI, b). Die Ösen waren zur Aufnahme von Ringen bestimmt, Entleerung des hängenden Krugs durch Handgriff am unteren Ring.

Vgl. S. Umehara, *Kanan Anyō ibutsu no kenkyū*, Tf. XXII.







Ku 觚 (XVII, a-c)

Shang. Neue Ausgrabung aus Anyang. Höhe 32,6 cm; Durchmesser der Öffnung 16 cm; des Standringes 8,2 cm; Gewicht 1,25 kg.

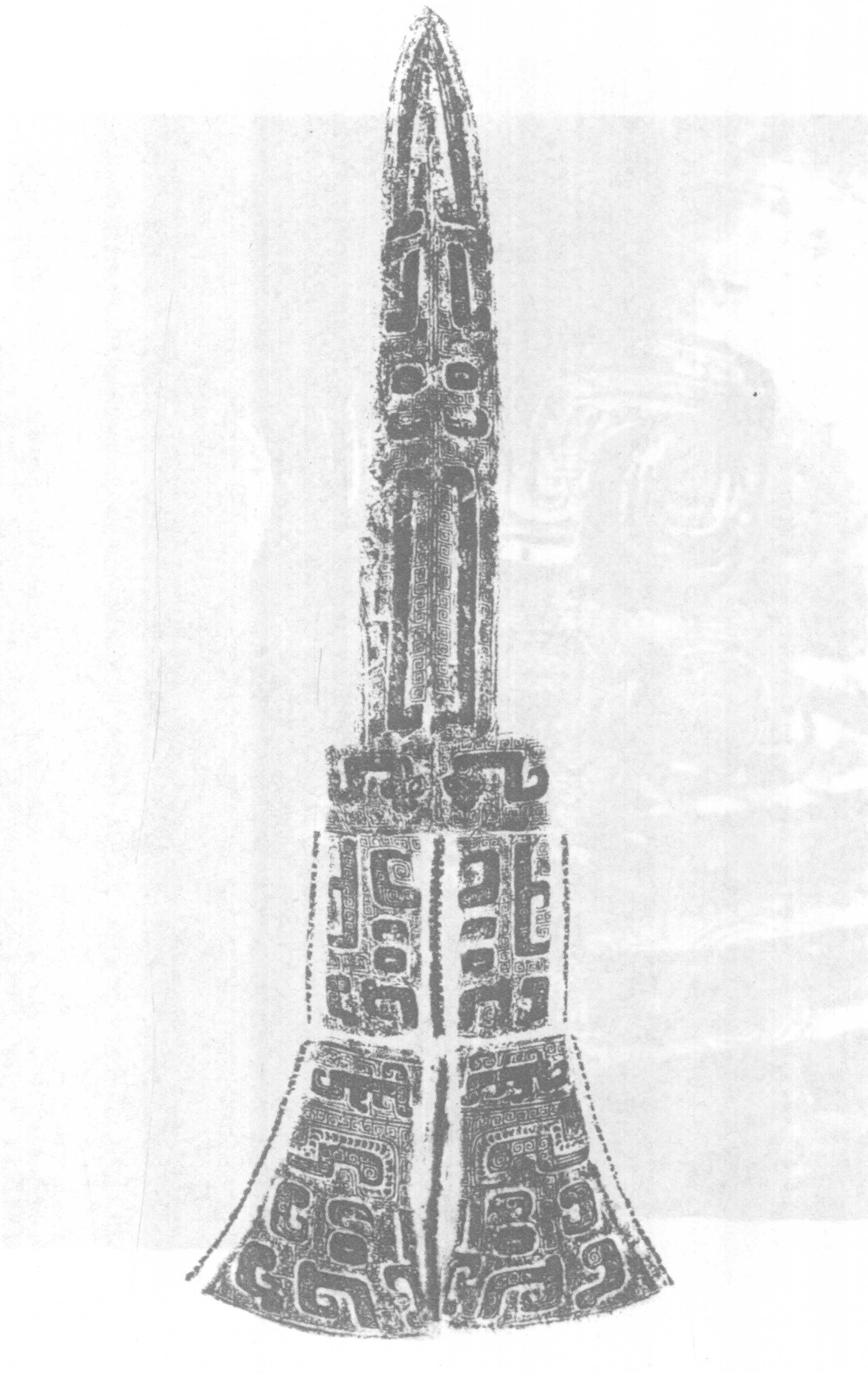
Glatter, blaugrüner Malachitüberzug mit Stellen türkisfarbener und schwarzer Lackpatina. Aussen und an den Innenflächen des Fusses lasurblaue Flecken.

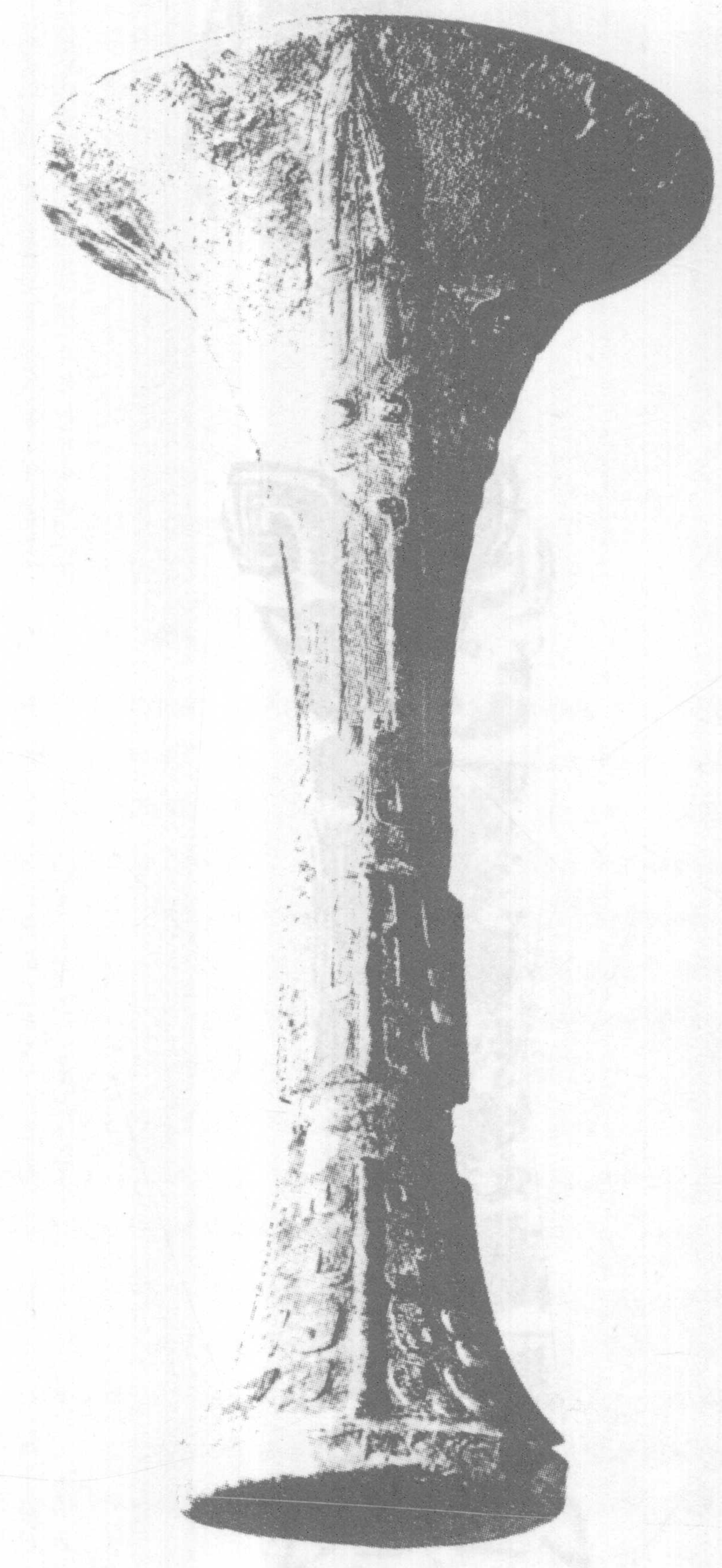
Kelchartiges Weingefäss von konkavem Umriss, mit hohlem, konischem Fuss auf Standring, mit kaum sichtbar gewölbtem Mittelteil und hoher, schalmeiartiger Öffnung. Von den zahlreich bekannten Beispielen des Typs unterscheidet sich dieses Ku durch ungewöhnliche Schlankheit.

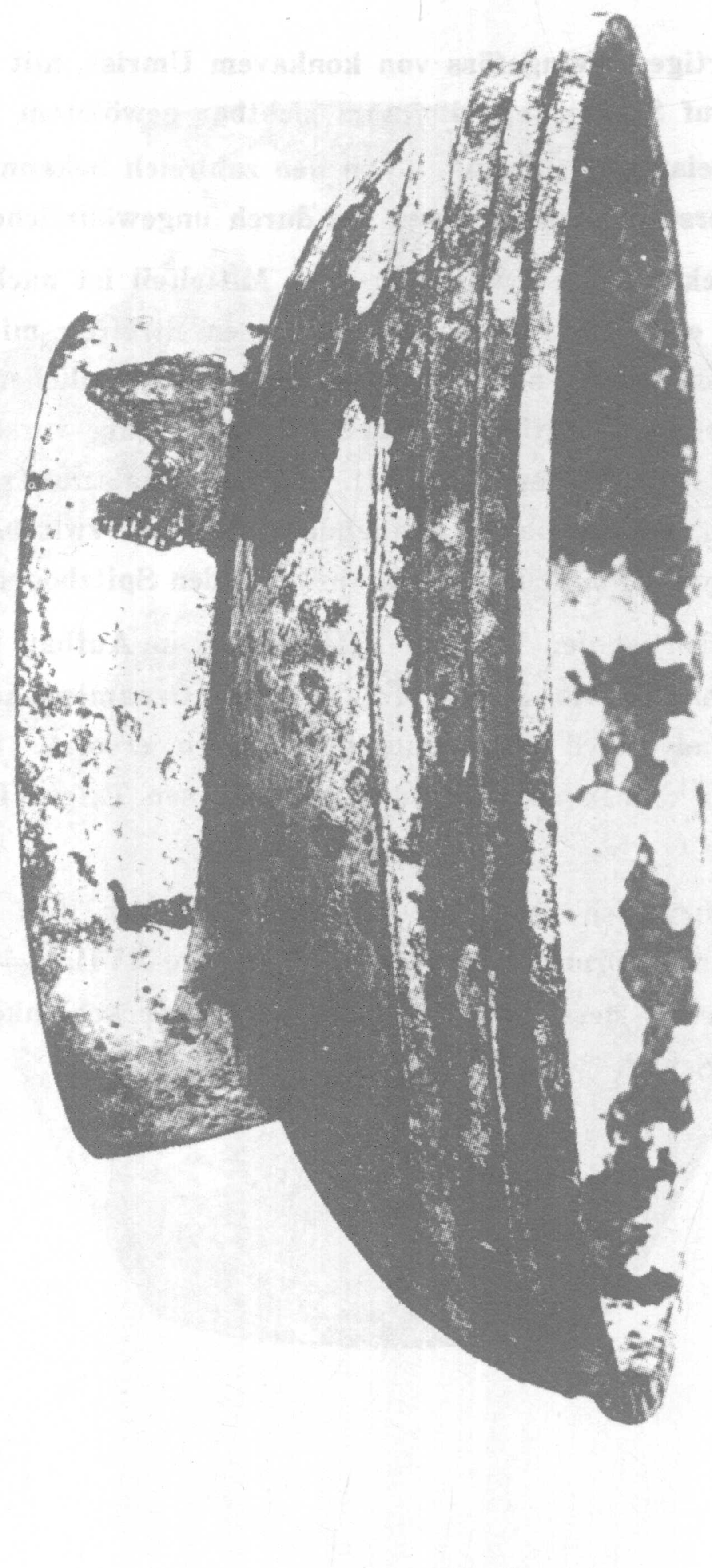
Reliefdekor auf Spiralgrund. Der Mittelteil ist nach unten abgegrenzt durch einen vertieften, ornamentlosen Streifen mit zwei kreuzförmigen Gusslöchern, nach oben durch einen ähnlichen, schmaleren Streifen. Fuss- und Mittelzone durch je vier wenig vorstehende Stege mit Kerbmuster in Felder unterteilt. Um den Halsansatz ein schmales Ornamentband, der darüber ausladende Hals glatt zwischen vier leicht erhöhten, schmalen, bis zum Rande auslaufenden Spitzbogen.

Der Kelch ist den Bronzen VIII und IX in Aufbau und Schmuckformen verwandt. Die Schlunddrachen des Ornamentbandes um den Halsansatz sind durch gegenständige Nattern ersetzt. Die T'aot'ieh-Motive des Ku können mit Hilfe der besprochenen Tafel VIII, b gedeutet werden.

Aufschlussreich erscheint ein Vergleich der drei von oben zu lesenden Spitzbogenornamente, in der Reihenfolge XVII, c — IX, b — VIII, b, die Steigerung desselben Masken-Motivs vom schlanken Blatt zum gratbetonten Schild.







P'an 盤 (XVIII, a-b)

Shang. Neue Ausgrabung aus Anyang. Höhe 13,5 cm; Durchmesser der Öffnung 34,6 cm; des Standringes am unteren Rand 21,5 cm; Gewicht 4,5 kg.

Blaugrüner Malachitüberzug, dazwischen grosse Stellen hellgrüner Lackpatina. Innen im Fuss krustige malachitgrüne Auflagerungen mit patinierten Lössresten, lasurblaue Stellen.

Schüssel mit hohem, konischem Fussring, mit dreifachem Sehnenornament als einziger Schmuckform.

Ein radartiges Zeichen innen in der Mitte des Bodens (XVIII, b).

Chia 斝 (XIX, a-f)

Shang. Neue Ausgrabung aus Anyang. Höhe, einschliesslich der Handgriffe, 49,5 cm; Durchmesser der Öffnung 22,3 cm; Gewicht 6,5 kg.

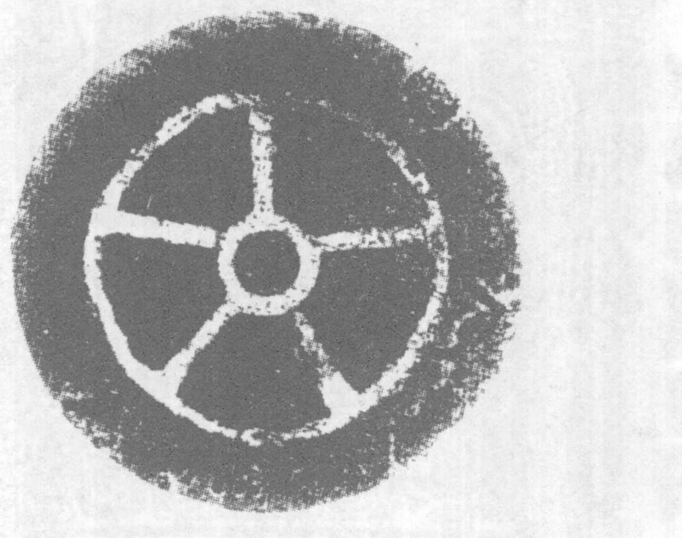
Silberhaltige Legierung, helle Bronzefarbe, hellgrüne Überkrustungen mit spangrün durchwucherten Lössresten.

Weinkübel von konkavem Umriss, auf drei hohen, konkav ausbiegenden, nach unten dolchartig zugespitzten Füssen von dreieckigem Querschnitt, mit gerundetem Henkel und rundplastischer, gehörnter Tiermaske auf dem Henkelansatz (XIX, c). Aus dem Gefässrand, symmetrisch zu beiden Seiten des Rundhenkels, erheben sich zwei Handgriffe von rechteckigem Querschnitt, mit dachartig ausladendem, unten flachem, konkav nach oben führendem, pilzförmigem Oberteil. Dieser dient als Fingerhalt beim Umkippen des Gefässes. Beim Trankopfer des Ahnenkults hat sich eine entsprechende Handhabung archaischer Opferbecher erhalten. Für die eigentümliche, an gleichzeitige Hornformen erinnernde Gestalt des Fingerhaltes bei den Typen *Chia* und *Chüeh* findet Karlgren Parallelen unter Zeichen der frühesten Shang-Inschriften, die von ihm als Fruchtbarkeitssymbole gedeutet werden.

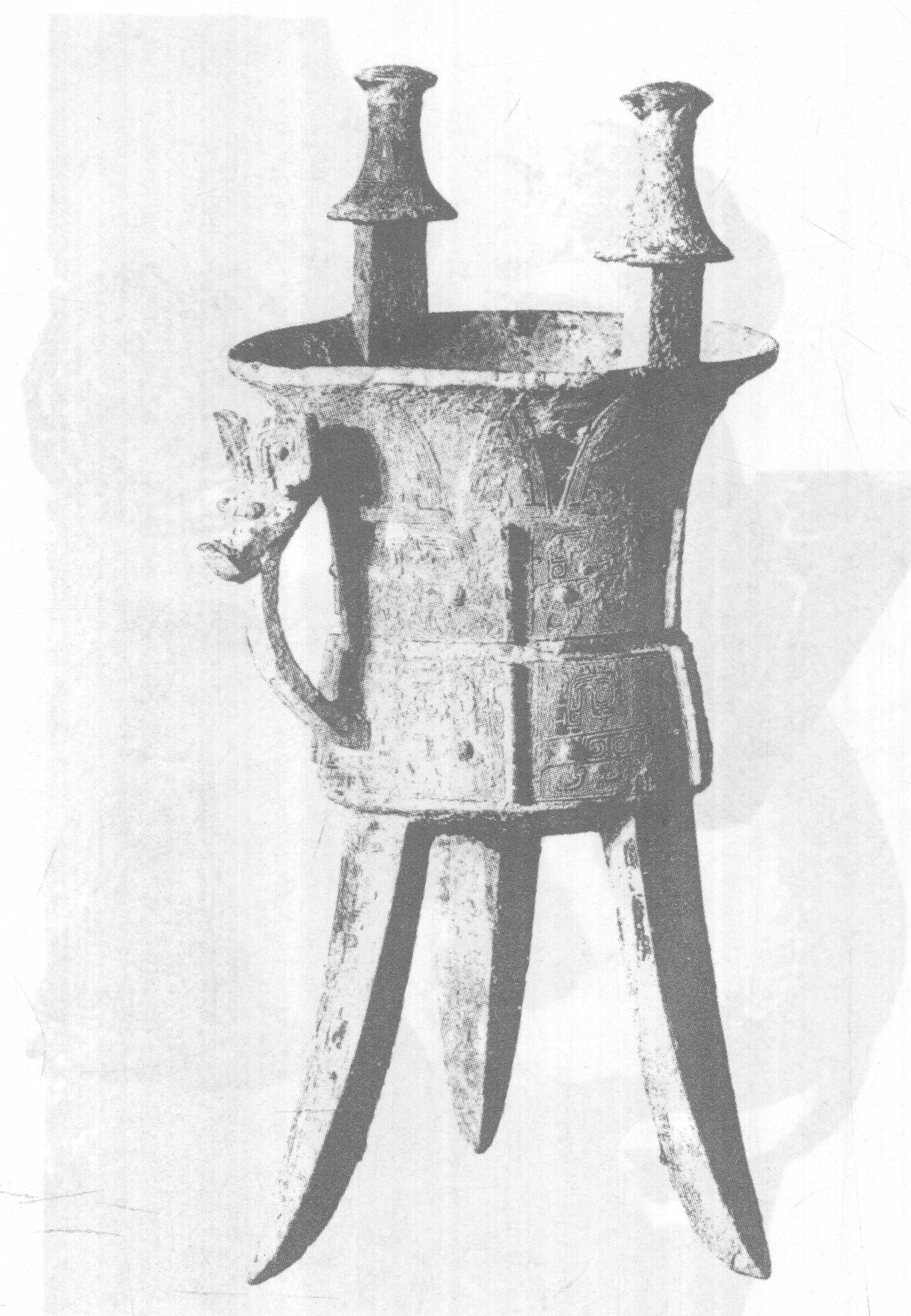
Flacher, auf Spiralgrund ausgesparter Dekor. Hängeblätter mit Zikadenornament (XIX, e) auf der Aussenseite der drei Füsse. Um den Rumpf zwei gleiche Hauptzonen, getrennt durch vertieften Streifen, beide Zonen vertikal unterteilt durch je fünf Reliefstege mit T-Kerben. Die obere, konkav ausladende Zone vertieft und glatt, mit elf leicht erhobenen, kronenartig umlaufenden, bis zum Gefässrand hinaufgeführten Zacken, diese mit umgekehrtem Zikadenornament (XIX, d).

Träger des ornamentalen Gedankens sind die jedesmal drei T'aot'ieh-Masken der beiden Zonen. Sie bestehen aus je zwei in Spiralen und T-Ornamenten stilisierten Drachenmotiven mit gegenständigen Rüsseln am Steg, mit gerolltem Horn, gerolltem Schweif, mit runden Augenbuckeln in geschweift angedeuteter Höhle (XIX, d). Im Henkel vertiefte Spiral- und Linienornamente (XIX, e). Auf den flachen Knöpfen der Handhaben Wirbelkreise, auf den konkaven Seitenflächen Zikadenmuster zwischen Spiralbändern. Ein Merkzeichen innen im Boden (XIX, f).

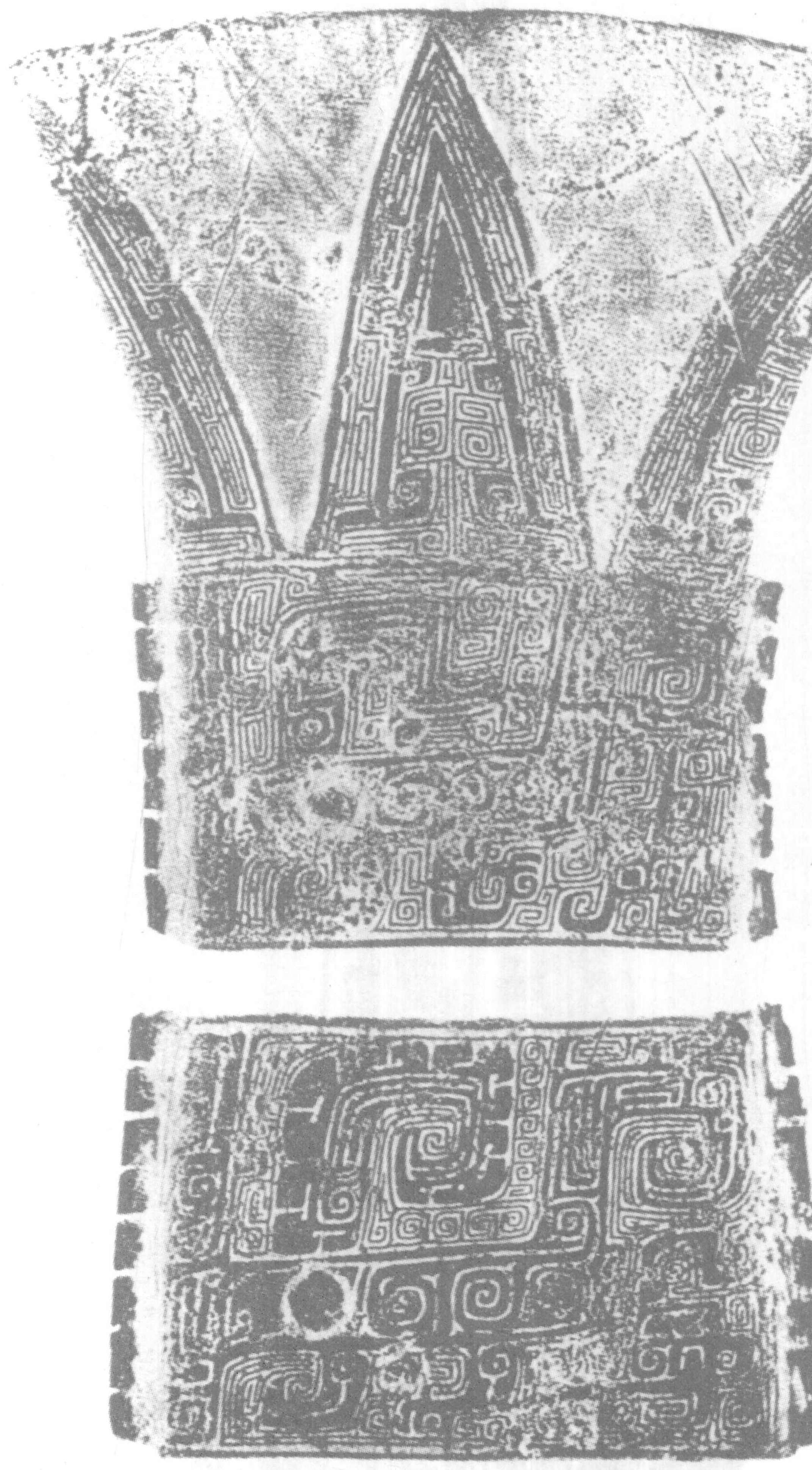
Abgebildet in Huang Chün, *Yeh-chung p'ien-yü*, III, ch. 1, fol. 35. Zur Formdeutung der Handhaben s. B. Karlgren, *Some Ritual Objects of Prehistoric China*, *The Museum of Far Eastern Antiquities, Bulletin* No. 14, 1942, pp. 67-69, Tf. XIV. Verwandte Stücke u. a. in S. Umehara, *Shina kodō seikwa*, I, 1, Tf. LXVI und LXVIII.

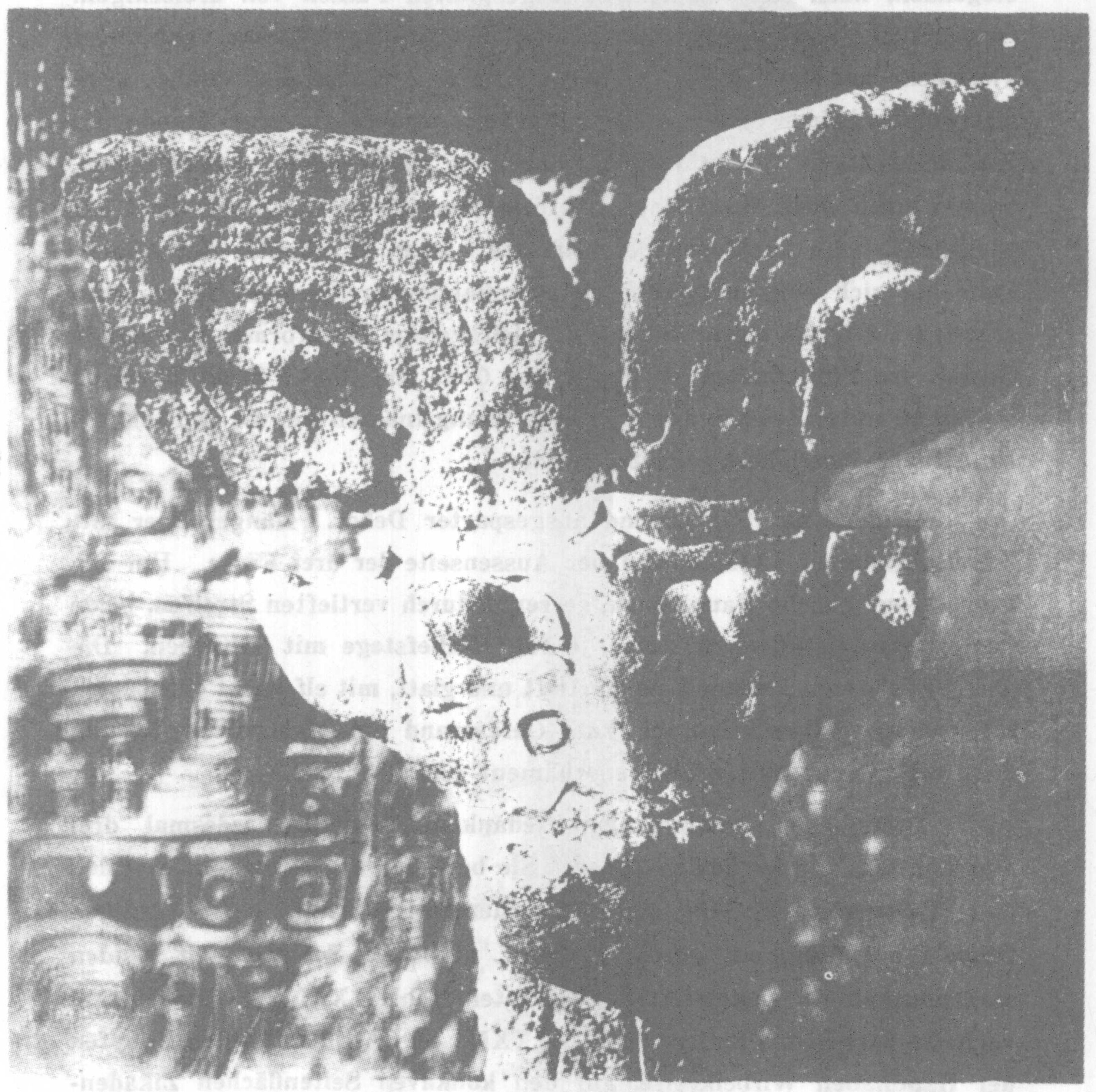


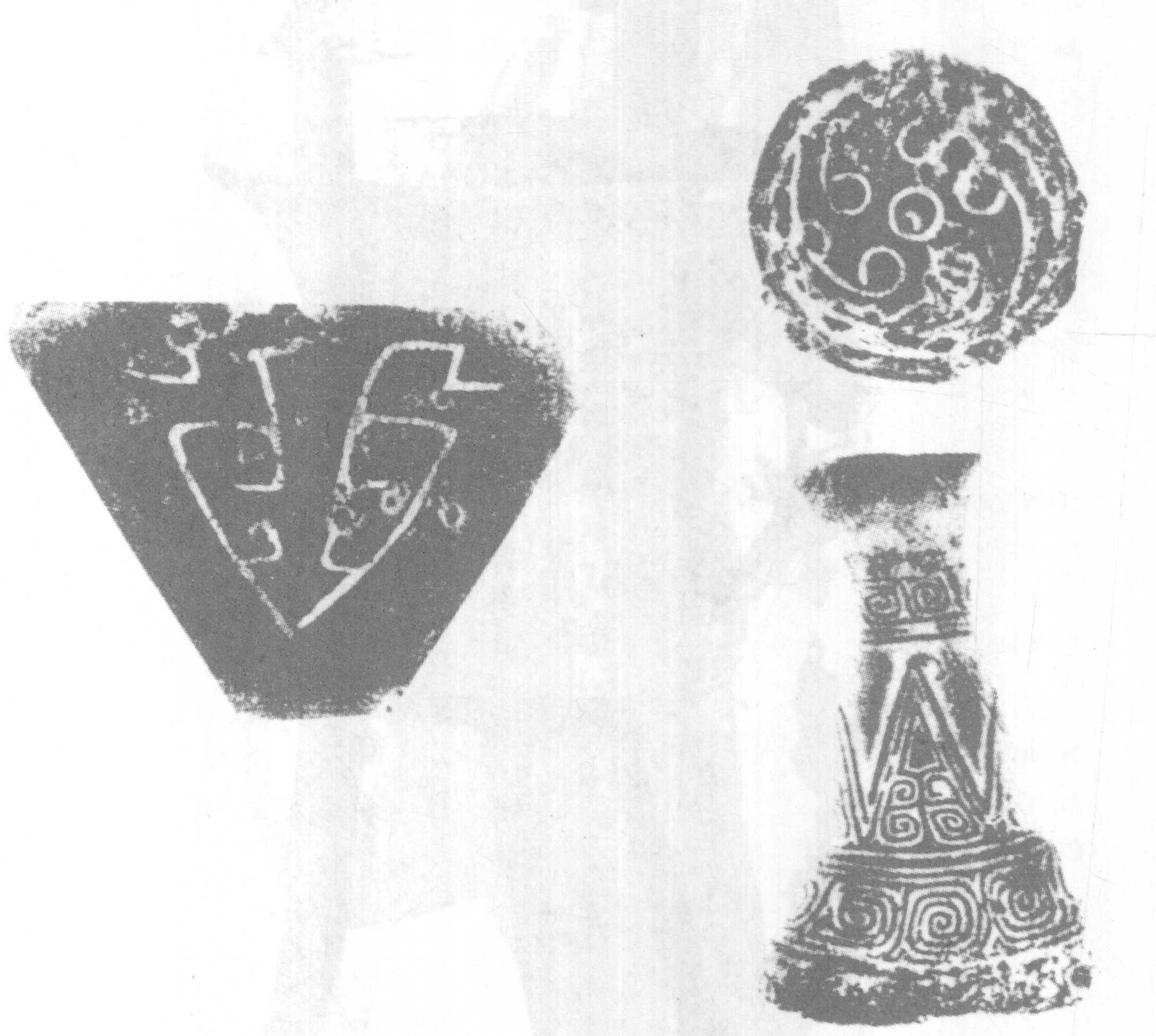




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Ho 盉 (XX, a-d)

Ende Chou. Ältere Ausgrabung. Höhe 35,5 cm; Durchmesser der Öffnung 12,2 cm; des Fussringes 14,8 cm; an der weitesten Stelle des Rumpfes 25,5 cm; Gewicht 6,25 kg.

Glatte, mattglänzende Handpatina, dunkelgrün mit braunen Flekken, kleine lasurblaue und malachitgrüne Stellen, am Hals braungrüne krustige Auflagerungen.

Ornamentlose Kanne mit glatter Leiste um die Öffnung, mit Tülle und mit einem Handgriff in Form eines stehenden, rückwärts sehenden Tigers mit langem, unten eingerolltem Schweif.

Zum Motiv dieses Tierhenkels s. W.P. Yetts, *The Cull Chinese Bronzes,* **London 1939, pp. 47,52.**

Über Form und Inschrift äussert sich Jung Keng, *Shang Chou i-ch'i t'ung-k'ao,* **I, p. 390:**

> "Das Gefäss sieht aus wie ein *Hu* 壺. Vorn hat es eine Tülle, hinten als Henkel ein stehendes Tier. Von den Gefässen der Shang- und frühen Chou-Zeit ist diese Kanne sehr verschieden. Ihre Form ist eine Abart aus der letzten Zeit der Kampfstaaten. Die Inschrift befindet sich aussen am Fussring. Ihr erster Teil besteht aus neun Zeichen in drei Zeilen: 邵宮和官四斗少半斗 ("Ho, in den Shao-Palast [der Ch'in-Fürsten] gehörig, [fasst] dreieinhalb amtliche Tou"). Der zweite Teil besteht aus vier Zeichen: 和工二感. Der dritte Teil umfasst sieben Zeichen in zwei Zeilen 廿三斤十五十兩; diese letzten zwei Zeilen sollten wie folgt gelesen werden: 廿三斤十兩十五 ("23 chin, 10 liang, 15"). Damit wird das Gewicht der Kanne und ihre Inventarnummer [nämlich Nr. 15] bezeichnet".

Die Kanne war ursprünglich in der Sammlung Tuan Fang, s. *T'ao-chai chi-chin-lu,* **ch. 5, fol. 2 (fol. 2a = XX, d), später in der Sammlung P'u-lun. Mit Inschrift abgebildet in Huang Chün,** *Tsun-ku-chai so-chien chi-chin-t'u,* **ch. 3, fol. 14; Abbildung auch in Jung Keng, op. cit., II, p. 257.**

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Chung 鍾 (XXI, a-e)

Zeit des Wang Mang 王莽, datiert 12 p. Chr. n. Ältere Ausgrabung. Höhe 32,5 cm; Durchmesser der Öffnung 14 cm; des Fussringes am unteren Rand 18,3 cm; an der weitesten Stelle des Rumpfes 27,5 cm; Gewicht 8,25 kg.

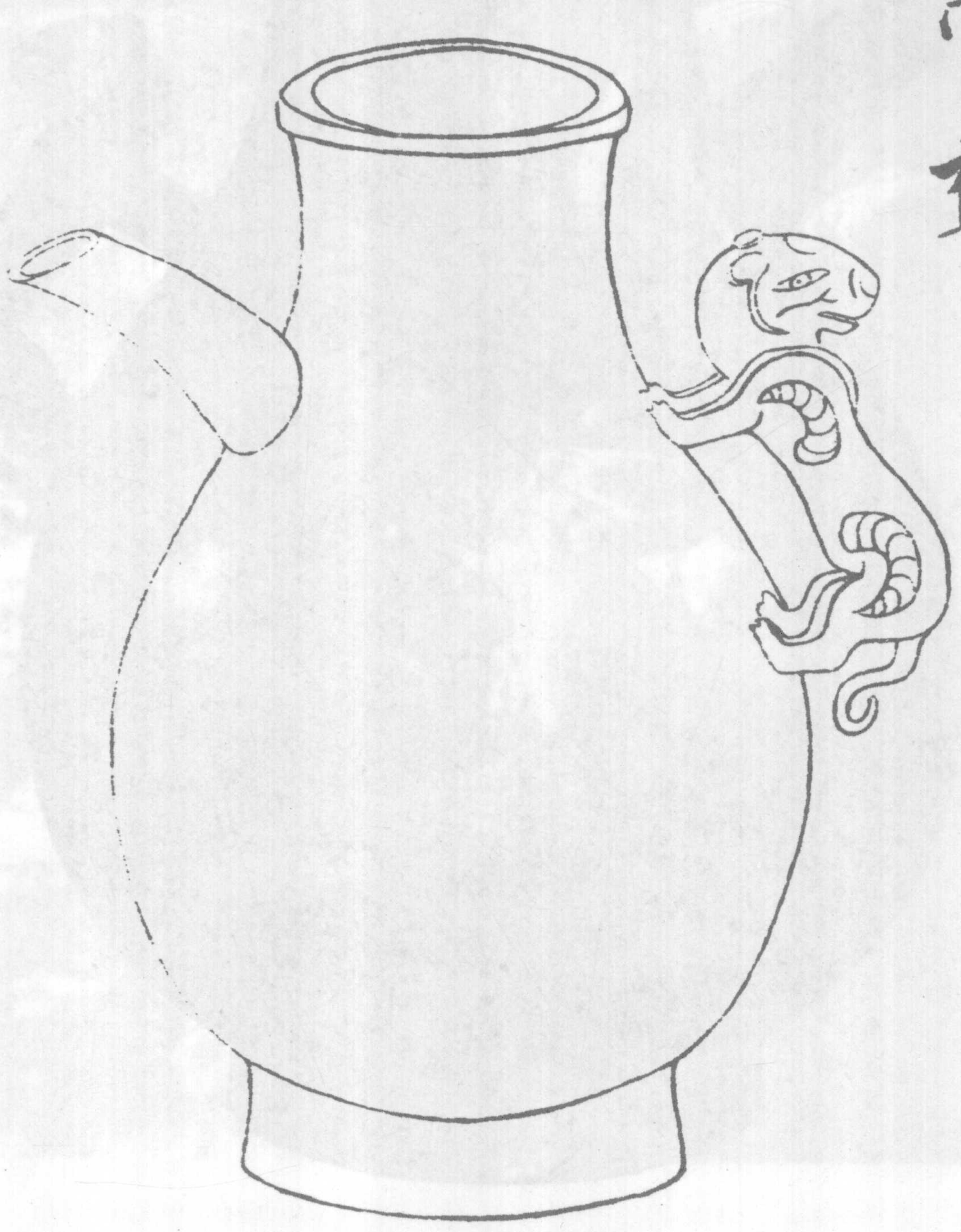
Glatte dunkelgrüne Handpatina, mit hellgrünen, braunroten und blauen Flecken und mit Stellen patinierter Lössreste.

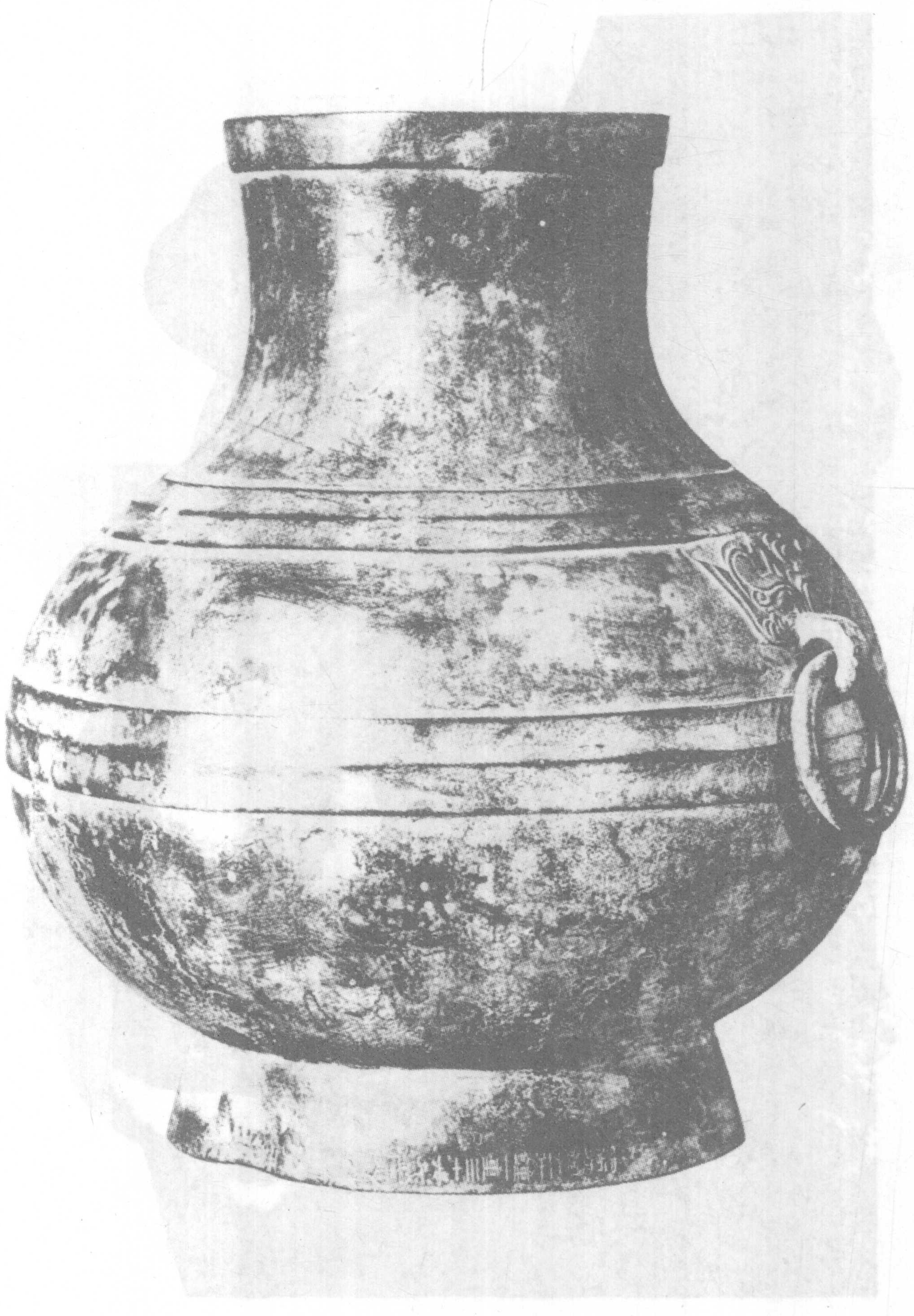
Kornmass in Form eines krugartigen Gefässes. Auf konischem Fussring ein bauchig gewölbter Rumpf mit konkav eingezogenem Hals und glatter Leiste um die Öffnung. Um die Wölbung und den Halsansatz je ein erhabenes Band mit erhöhtem, mittlerem Grat. In der Zone zwischen den beiden Bändern die beiden Handringe in Ösen an reliefierten, nachgravierten T'aot'ieh-Masken (XXI, c).

Inschrift aussen am Fussring. Der Vorbesitzer Ch'en Chieh-ch'i, s. *Fu-chai ts'ang-ku-mu*, Teil 15, Klasse *Chung*, Nr. 1 (XXI, a), liest "3. Jahr *Shih-chien-kuo*" statt "4. Jahr" (12 p. Chr. n.). Die Inschrift lautet: 中 尙 方 銅 五 斗 鍾 一 重 三 十 六 斤 始 建 國 四 年 桼 月 工 口 口 口 東 啇 夫 口 掌 護 常 省. ("Bronze-Chung 5 tou fassend, Gewicht 36 chin, aus der Palast-Werkstatt *Chung-shang-fang*. Im 7. Monat des 4. Jahres *Shih-chien-kuo* hergestellt von ... etc.")

S. Jung Keng, *Han chin-wen-lu*, ch. 2, fol. 2a, und ibid., *shih-wen* 釋 文, fol. la. Mit Inschrift abgebildet in Huang Chün, *Tsun-ku-chai so-chien chi-chin-t'u*, ch. 4, fol. 17.

秦郃宮盉





下出全器始知止文三字

鍾一 尺三

新莽中尚方鍾

始建國三年是年辛未

二

東漢陳彤鍾

陽嘉二年順帝八年癸酉中郎生

(前有白頁1)





Yen-tsu-teng 雁足鐙 (XXII, a-b)

Zeit der Westlichen Han-Dynastie, datiert 65 a. Chr. n. Ältere Ausgrabung. Höhe 13,8 cm; Durchmesser des Öltellers 11,5 cm; Gewicht 0,75 kg.

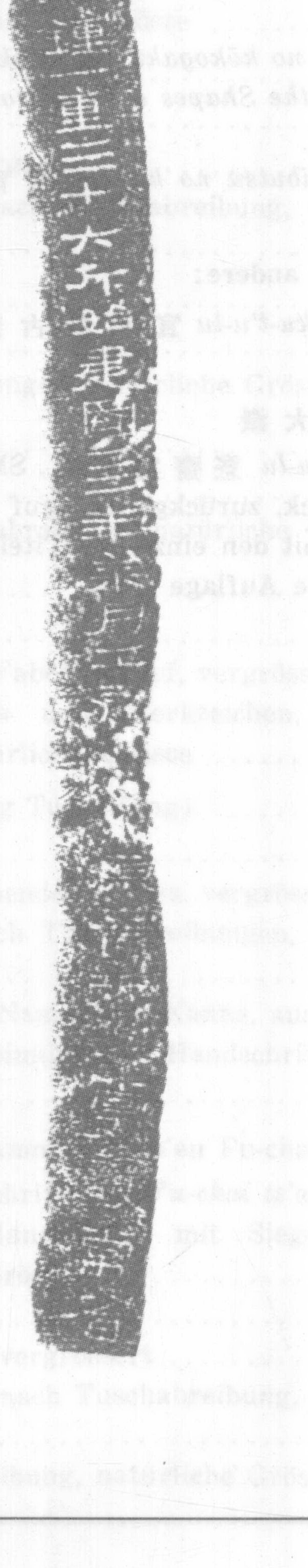
Glatte Handpatina, dunkelgrün mit rotbraunen Flecken.

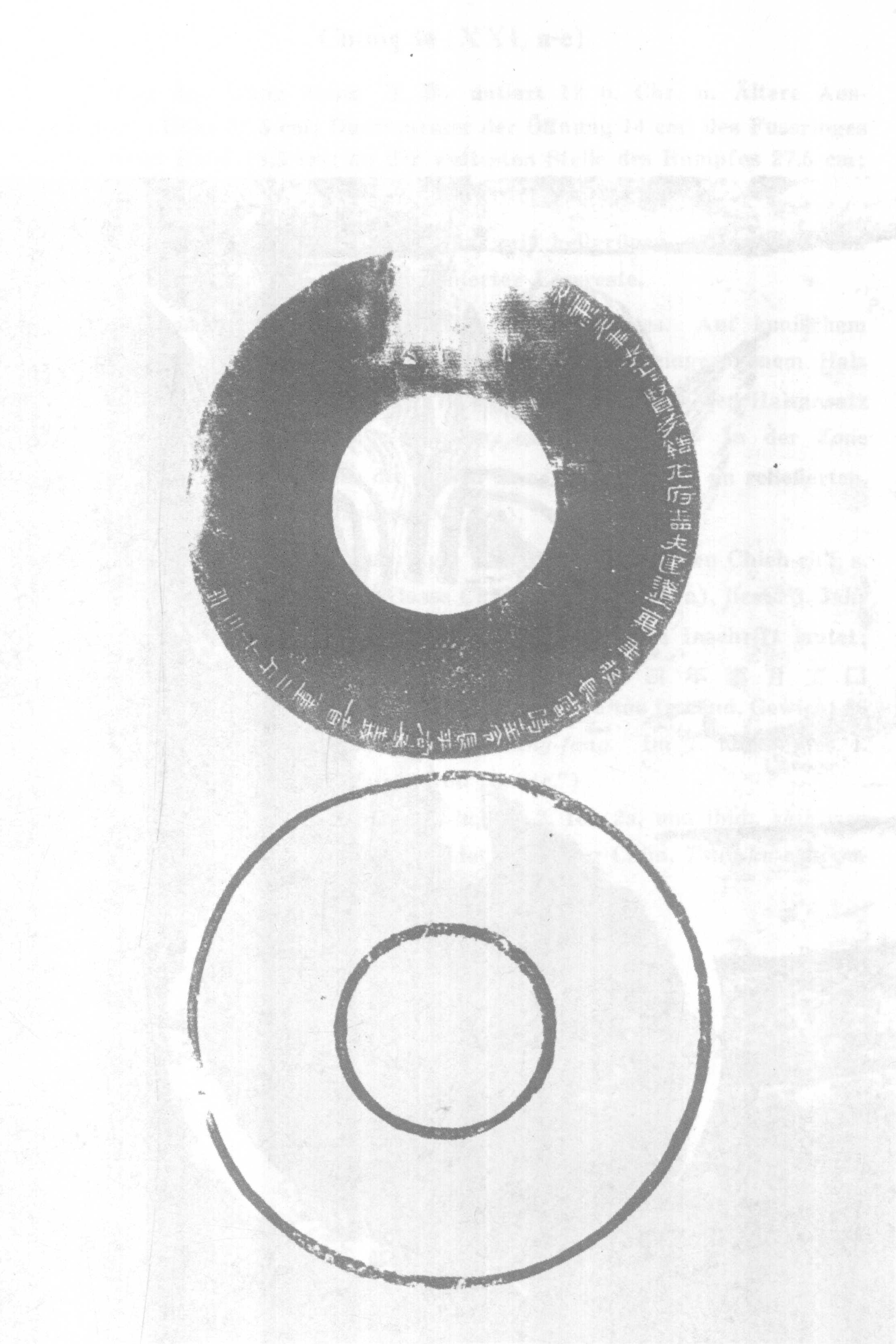
Öllampe in Form eines Wildgansfusses.

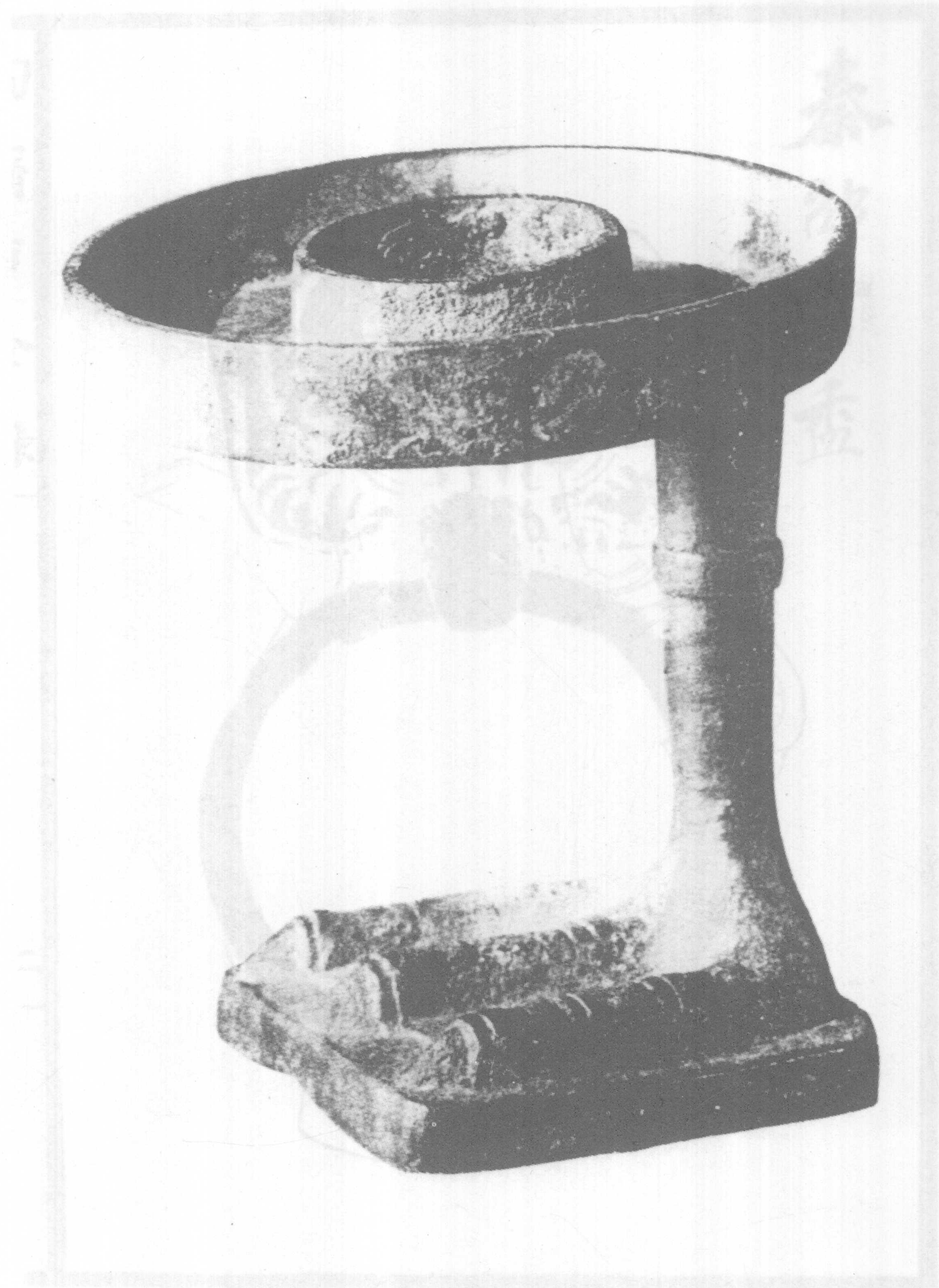
Die Inschrift lautet: 元康元年考工工賢友繕作府嗇夫建護萬年般長當時主令長平右丞義省重二斤十三兩. ("Im ersten Jahre Yüan-k'ang [65 a. Chr. n.] . . . Gewicht 2 chin und 13 liang").

Ehemals Sammlung P'u-lun.

S. Jung Keng, *Han chin-wen-lu*, ch. 3, fol. 17a, und ibid. *shih-wen*, fol. 2a. Mit Inschrift abgebildet in Huang Chün, *Tsun-ku-chai so-chien chi-chin-t'u*, ch. 4, fol. 25. Vgl. auch S. Umehara, *Shina kodō seikwa*, I, 3, Tf. CCXLIV.







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INHALTSVERZEICHNIS

Bemerkungen

Dekorbeschreibung vor allem im Anschluss an B. Karlgren und M. Loehr.
Alle Aufnahmen nach Angaben des Herausgebers.



LEI

CHINESE BRONZES

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CHINESE BRONZES

FROM

THE BUCKINGHAM COLLECTION

By CHARLES FABENS KELLEY

and CH'EN MENG-CHIA

THE ART INSTITUTE OF CHICAGO

1946

PREFACE

THE LUCY MAUD BUCKINGHAM COLLECTION

It has long been the intention of The Art Institute to publish a comprehensive and well illustrated book on the Lucy Maud Buckingham Collection of Chinese Bronzes. This remarkable group is chosen from a collection which is not only one of the glories of the museum but is already famous among Orientalists.

Twenty-one years ago Miss Kate S. Buckingham bought her first Chinese bronze. The moment was propitious. Bronzes were rapidly coming into foreign favor. New excavations revealed new masterpieces of this ancient art. Occidental collectors whose far horizons had been bounded by the Ming Dynasty now realized that pure Chinese design was of vastly greater antiquity and perceived that these ancient bronze makers were among the most perfect designers and craftsmen in the long history of art.

Chicago was fortunate in having a donor like Miss Buckingham who sensed their importance. Aided by our Curator of Oriental Art, Charles Fabens Kelley, who is one of the recognized authorities in this field, she added bronze after bronze, determined to make the collection one of the best in the world. Since her death a few extraordinary examples have been acquired through the fund Miss Buckingham left to continue her collections.

For this publication The Art Institute was fortunate in securing the collaboration of Ch'en Meng-chia, Professor of Chinese Archaeology and Paleography, at the National Tsing-Hua University of Peiping. Professor Ch'en is a most eminent scholar

in this field and his translations of inscriptions as well as his excellent commentary on the history and use of Chinese bronzes is a true contribution. The specialist will find new material in these notes and the general reader will discover that Professor Ch'en has corrected many popular misapprehensions. In order to show the illustrations to the greatest advantage, it has been decided to put this detailed material in the rear of the volume. The descriptions and arrangement of plates are the contribution of Mr. Kelley, who has edited the study as a whole.

As shown in detail and large scale photographs, these bronzes are full of an extraordinary vitality. To Western eyes their forms are often brilliant and original. The motifs that relate (rather than merely ornament) their formal "architecture" are equally resourceful. Indeed, such mastery of design pervades even the simplest of these pieces that the Buckingham Collection should more than ever become the inspiration of our designers and enlarge the delight of the public in great works of art.

Daniel Catton Rich, *Director*

CONTENTS

FOREWORD

In presenting this volume of bronzes from the Buckingham Collection, the purpose has been to represent them as adequately as illustrations will permit, so that they may be seen in all their impressive solidity and solemn grandeur. The color of ancient bronzes is of course an element of great appeal, but we can be sure that the color of the bronzes as we see them is not at all like the color which their original owners knew. It may be then that monochrome illustrations, by no means a distinct advantage, will nevertheless force us to concentrate our attention on the elements which made these bronzes meaningful to the Chinese.

The significance of the decoration offers a vast field for speculation, but the authors believe there is no purpose in introducing speculations in a volume such as this. When the Shang bronzes known to us were made, there were many centuries of evolution behind them, not only in the processes of bronze founding but in the organization, integration and stylization of design motifs. Undoubtedly scientific excavation will soon be resumed in China, shedding new light on archaeological problems. We therefore see no purpose in stating here anything but the known facts. Esthetically the bronzes speak for themselves.

When Miss Kate Buckingham began collecting Chinese bronzes it was solely to honor the memory of her sister with things of beauty, above average quality and of definite esthetic appeal. She did not care to include all types nor was she particularly

interested in unique specimens. The satisfaction derived from the possession of a few outstanding examples led to further acquisitions and finally the realization that a collection had actually been assembled. Miss Buckingham professed no knowledge of Oriental Art but her standards were high and exacting.

This seems a good time to make these impressive and beautiful bronzes accessible to a larger public which is coming to realize how rewarding it is to know more about Chinese culture.

Professor Ch'en Meng-chia, by great good fortune in Chicago at this time, has expressed his willingness to put the results of his intensive study of early bronzes at our disposal. He is responsible for the commentary and the notes. Professor Ch'en believes that some of the most important examples known may be found among our bronzes and also among the inscriptions.

The authors wish particularly to thank Miss Margaret O. Gentles, Assistant Curator of Oriental Art, for the bibliography and for the constant help which greatly contributed to the completion of the work.

The photographs, remarkably successful in capturing the appeal of the bronzes, were made by Mr. Richard Brittain, photographer for The Art Institute.

Charles Fabens Kelley

CHRONOLOGY OF CHINESE DYNASTIES

DYNASTY	NEW CHRONOLOGY	TRADITIONAL CHRONOLOGY
SHANG		1766–1123 B.C.
From T'ang to the year before P'an Keng's removal of the capital to Yin	? –1301 B.C.	
From P'an Keng's removal of the capital to Yin to the end of the Dynasty	1300–1028 B.C.	
CHOU		1122– 256 B.C.
Western Chou	1027– 771 B.C.	
Eastern Chou		
Ch'un Ch'iu period (period of the Spring and Autumn Annals), from P'ing Wang's removal to Lo-yang to the last year recorded in the book of Ch'un Ch'iu	770– 481 B.C.	
Chan Kuo period (period of the Warring States), from the year after the close of Ch'un Ch'iu until the year before the unification under Ch'in	480– 222 B.C.	
CH'IN		
From the unification under Ch'in Shih Huang Ti until the end of the Dynasty	221–206 B.C.	
HAN		
Former Han	206 B.C.– 8 A.D.	
Hsin	9– 23 A.D.	
Later Han	25–220 A.D.	

The traditional chronology is based on *Synchronismes Chinois* par Le P. Mathias Tchang, S.J., Shanghai, 1905, which followed the chronology of the Hsia, Shang and Chou, after Liu Hsin's *San T'ung Li* of the Former Han Dynasty, compiled without any reliable sources. The new chronology is taken from Ch'en Meng-chia's *Study on Western Chou Chronology* in Chinese, Commercial Press, Chungking, 1945. It is based on the Bamboo history compiled from 297 to 296 B.C.

TEXT AND PLATES

MASK

Shang Dynasty

This massive bronze mask, harsh, forbidding and intense, seems to be unique among Chinese bronzes. The style and the inscriptions put it definitely in the Shang Dynasty, but lack of material for comparison makes it practically impossible to determine its purpose. There are slight marks of brazing at the top of the reverse side which might indicate a metal fixture for suspension. At either side of the jaws are the remains of bronze attachments which could easily have been loops for suspended rings.

This bronze is quite heavy, evenly patinated in grayish green of middle values, and an exposed edge is sound and of a bright gold color. There are no incrustations.

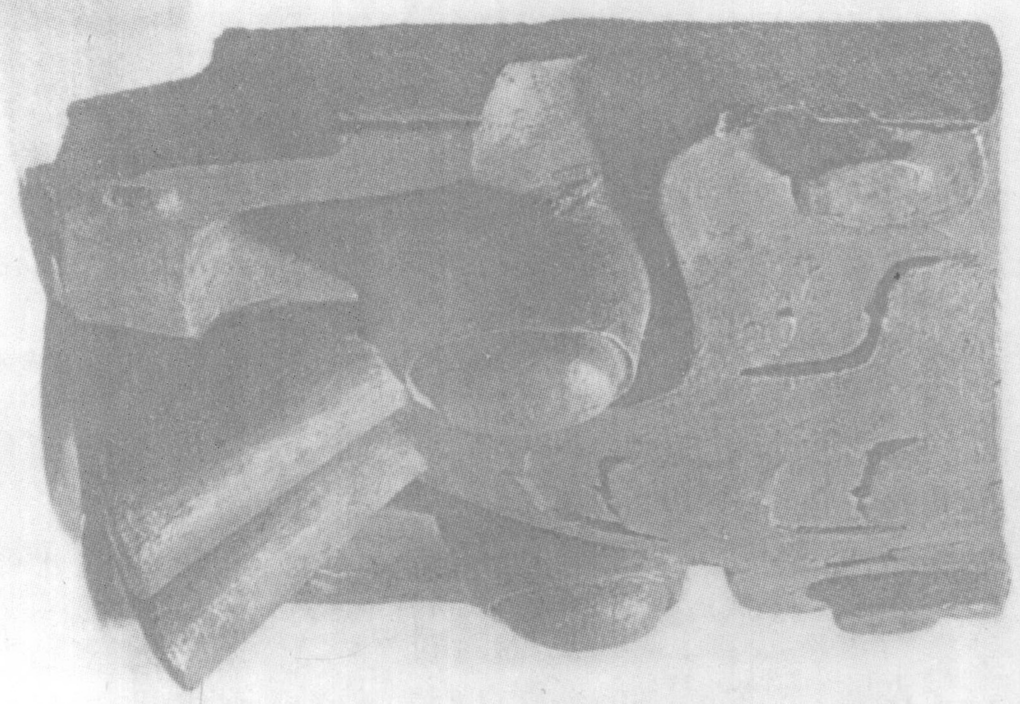
An inscription and confronted dragons on the back are very sharply defined, although the animals are not deeply recessed. The inscription indicates that the vessel belonged to the Ya division of the Pu clan.

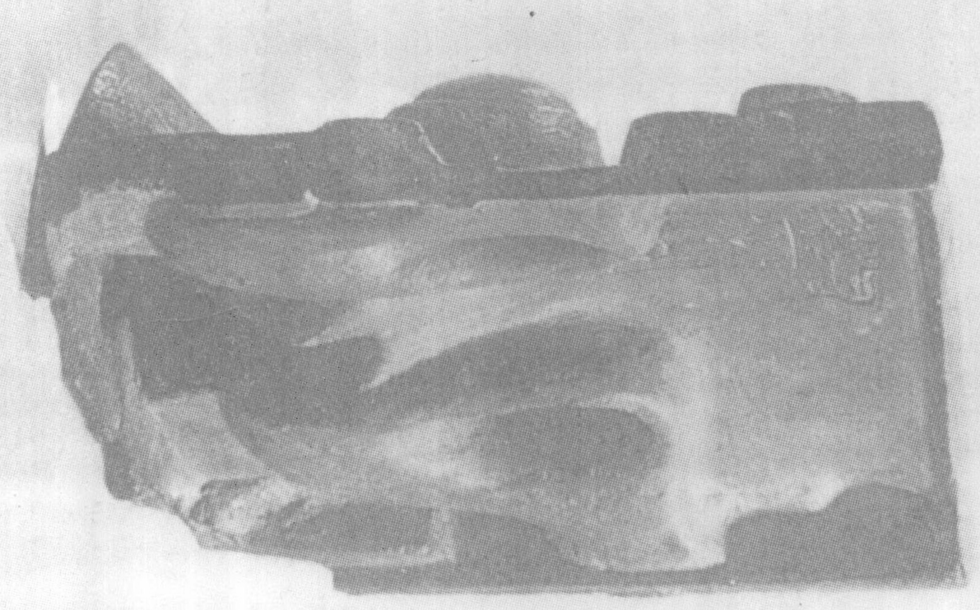
Height: 8⅝ *inches* (22.0 *cm.*)

Width: 14¼ *inches* (36.1 *cm.*)

Accession number: 26.357

PLATE II





MASK *Three-quarter views*

PLATE I



MASK *Front view*

FOOD VESSEL *TING*

Shang Dynasty

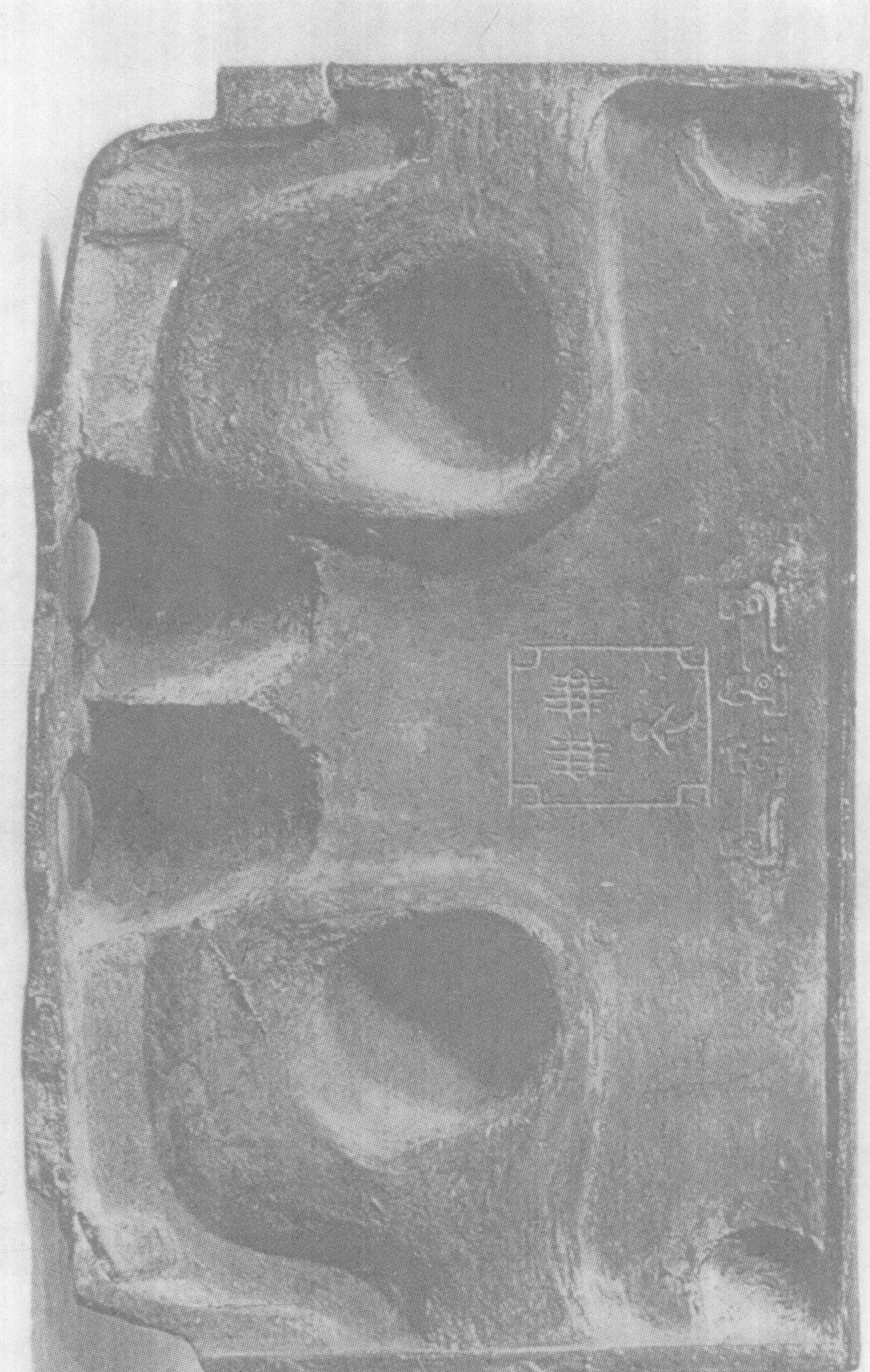
Quiet and simple in form this small *ting*, a vessel for heating food, is remarkable for its spirited decoration of confronted birds, brought into sharp contrast by the lacquer-like black substance with which the incised lines of the design are filled. It is possible that a majority of the early bronzes were made with this niello type of surface decoration, which, in most cases, has entirely disappeared. Microscopic examination of our piece shows that the minute scars caused in freeing the bronze from incrustations are visible equally on the metal and the black composition in the incisions, which would indicate that it is not a later addition.

The patination is a light greenish gray with patches of green and red incrustation.

The inscription, cast inside the long side, indicates that the vessel was made by the Ya class of the Ch'i clan for sacrifices to Father I.

Total height: 6⅝ *inches* (17.0 *cm.*)
Width: 5⅝ *inches* (14.2 *cm.*)
Accession number: 38.1115

PLATE III



MASK *Rear View*

WINE VESSEL *CHIA*

Shang Dynasty

The *chia* was designed for very practical purposes, and too frequently its esthetic elements were neglected. Often the lids, though original, seem to be an afterthought, not thoroughly integrated with the design, and dwarfed by the upstanding handles.

This early *chia* is a masterpiece, combining practical and esthetic elements in perfect balance. The capacious body rests firmly on three undecorated legs: since they were to stand in the fire no decoration was needed. The handles by which the pot was removed from the fire are just large enough for their function,—they are carefully subordinated to the charming bird handle which dominates the lid with an air of complete assurance. The simple unnotched fins indicate an early date. The decoration is entirely two dimensional. The *t'ao-t'ieh* is the dominant figure, but the pattern is interesting throughout, in a manner which suggests the turquoise inlays which were found on early Shang dagger handles.

The inscription, one character cast at the bottom, is a clan name, "Ling."

Diameter at lip:	6 11/16 *inches* (17.0 *cm.*)
Height with lid:	10 3/4 *inches* (27.2 *cm.*)
Height without lid:	7 5/8 *inches* (19.5 *cm.*)
Accession number:	46.4

PLATE IV



TING Three-quarter view

PLATE VI



CHIA Rear view

PLATE V



CHIA Three-quarter view

WINE VESSEL *CHIA*

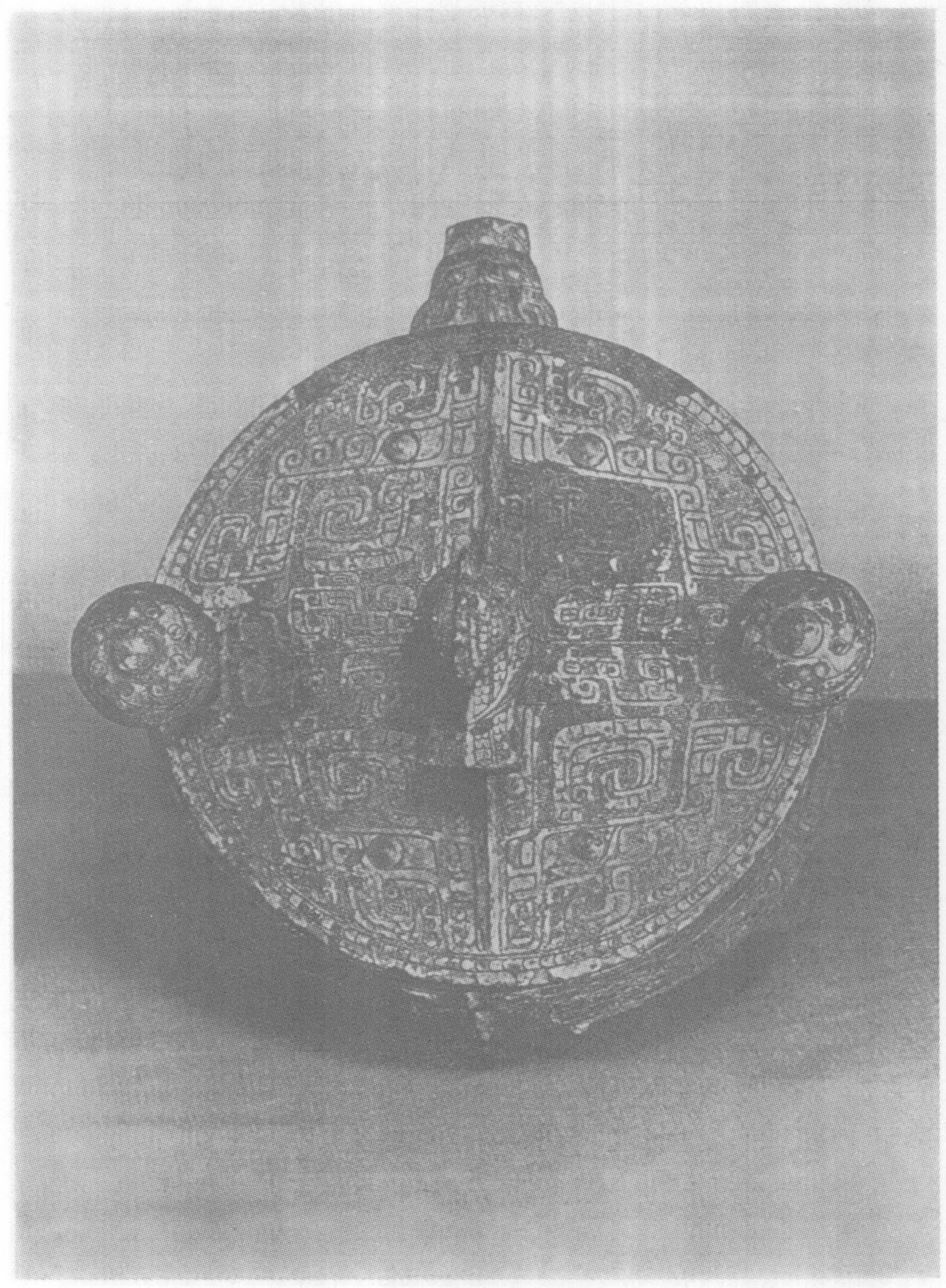
Shang Dynasty

This curious massive *chia* is a type made only in Shang times. No later examples are known. The legs supported the cup over a fire, so its contents might be heated. The side handle could be used for pouring. The top handles were for removing the vessel from the fire, probably by means of hooks. The form is somewhat clumsy and not well integrated, but it is nevertheless impressive, if only for its size and appearance of great solidity and the animal head on the handle which is alert and lively. The legs were cast hollow, directly on the body, and the founders did not bother to remove the fire clay core, which may still be seen.

The patina is a very dark brown, almost black, and there are no incrustations. The decoration is clearly defined.

Height: 20½ *inches* (51.5 *cm.*)
Diameter of cup: 9¼ *inches* (23.5 *cm.*)
Accession number: 26.1599

PLATE VII



CHIA *Top view*

WINE VESSEL *LEI*

Shang Dynasty

This very unusual type of *lei* is said to have been excavated at Anyang, capital of the Shang-yin Dynasty, and its style conforms in every respect to objects found on that site. Jars of this form are thought to have been used for the storage of liquids.

Very simple, the jar is boldly decorated with large scale motifs, whose sensitively managed relief prevents a harsh and crude effect. Like certain other early bronzes the lid bears *t'ao-t'ieh* masks facing upward so that they could be seen in their customary attitude only by one looking down upon them.

The handles on the shoulders might have had a cord attached to them for carrying, and the lower handle on the front would have been used to tip the jar when emptying its contents. Inside under the crown of the lid is a cicada, cast in high relief, but there is no inscription. The bottom of the jar is concave and without a foot.

Our *lei* is particularly handsome in color (see frontispiece), with a prevailing tone of cool gray. Light deposits of azurite and malachite enhance its beauty. Traces of an inlaid substance remain in the incised design on the lid's knob.

Height: 17¾ *inches* (45.0 *cm.*)
Diameter of mouth: 5⅛ *inches* (13.2 *cm.*)
Diameter at handles: 9¾ *inches* (24.8 *cm.*)
Accession number: 38.17

PLATE VIII



CHIA *Three-quarter view*

PLATE X



LEI *Side view*

PLATE IX



LEI *Front view*

WINE VESSEL *KU*

Shang Dynasty

The *ku* follows very restricted lines, variations occurring as a rule only in the decoration which is always of delicacy and precision. In the best examples the curve of the profile may be compared to the echinus of a capital from the Parthenon, so sensitive is its springing sweep. In the ringed band toward the bottom of the piece are two cruciform incisions on opposite sides. These are frequently found totally perforated in *ku* but on few other bronzes. Perhaps their meaning will never be known.

Our *ku* runs practically the entire gamut of bronze coloration. Inside the mouth the lead-colored surface appears to be in original condition. Outside many chemical changes have altered the color and composition of the bronze so that the surfaces freed from incrustation range from light straw green to deep brown. There are also rust colored, malachite and azurite deposits.

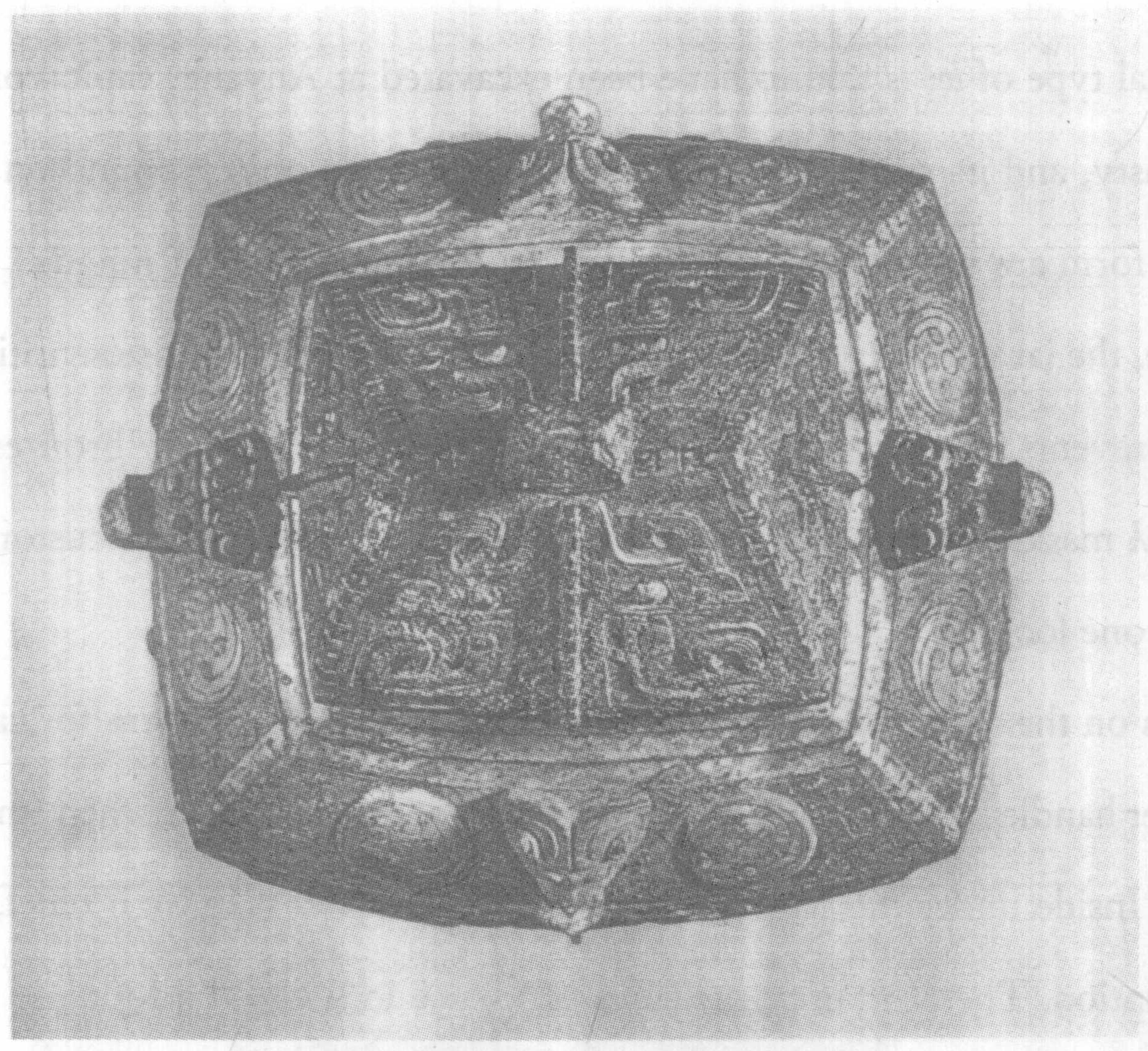
Two characters inside the foot reading "Yu" and "K'uei" indicate that the vessel was made by the Yu clan for sacrifices to Father Kuei.

Height: 12¼ *inches* (31.2 *cm.*)

Diameter at lip: 6⅞ *inches* (17.5 *cm.*)

Accession number: 37.2

PLATE XI



LEI *Top view*



LEI *Cicada inside lid*

WINE VESSEL IN FORM OF BIRD *TSUN*

Shang Dynasty

This lively little creature is a fascinating blend of alert poise and solemn dignity. In addition to the ears, there are bottle-shaped horns, a familiar dragon accessory, and a view from above shows a tiger mask ingeniously integrated with the other forms to produce a truly composite animal. Though the design seems intended for pouring through the beak there is no orifice. A ridge on the back serves as a handle for the lid. The underside bears a checked pattern. The metal has become almost completely mineralized, with a curious wax-like surface of a yellowish brown color. There are slight incrustations of malachite.

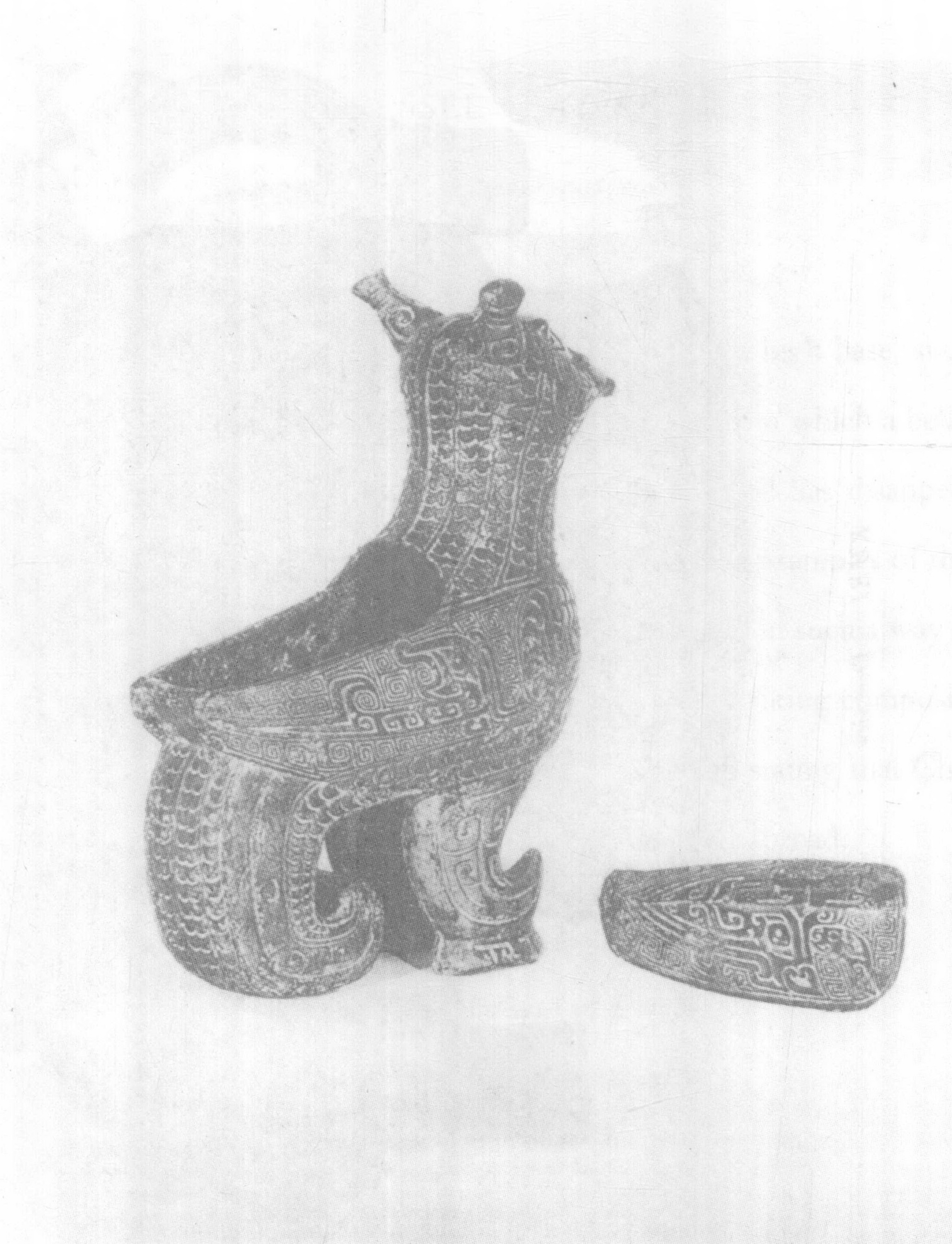
Height: 6¼ *inches* (15.9 *cm.*)

Length: 5¼ *inches* (13.3 *cm.*)

Accession number: 36.139



KU



TSUN *With lid removed*



TSUN *Side view*

FOOD VESSEL *KUEI*

Shang Dynasty

This *kuei*, compact both in form and decoration, has a very spirited profile for such a heavy form. The pendants to the handles, on which are seen the feet of animal-headed birds, seem to contribute greatly to the solidity of the design, regardless of their archaeological significance.

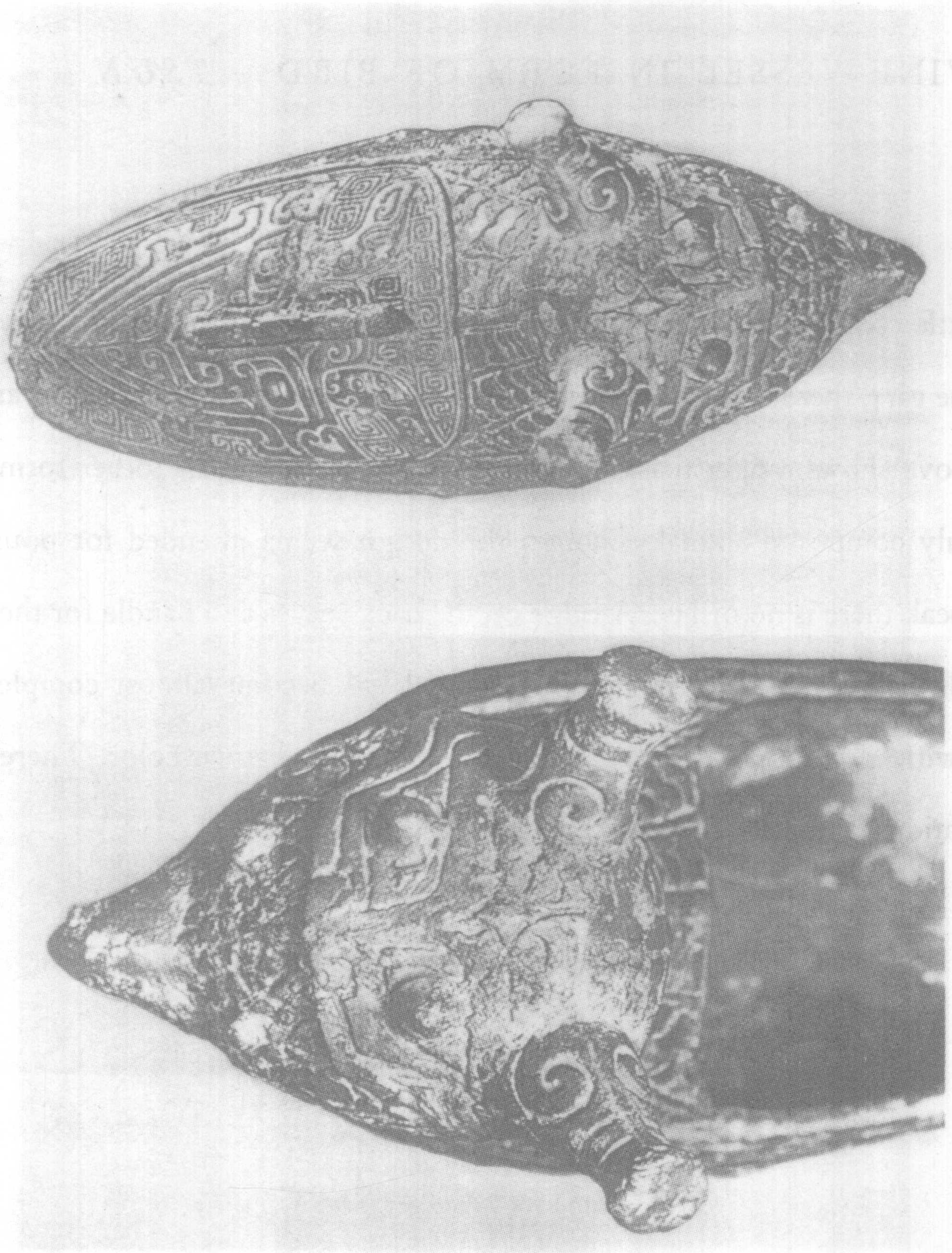
On the outside surface of the bottom of the cup a design is roughly cast in raised outline of a dragon encircling a sort of tadpole-like creature, probably a tortoise. Inside the cup on the bottom is cast a handsome inscription which may be translated: "(For sacrifice for) Father Chi of the Ya class of the Ping clan."

Height: 6¾ *inches* (17.5 *cm.*)

Diameter: 9⅛ *inches* (23.0 *cm.*)

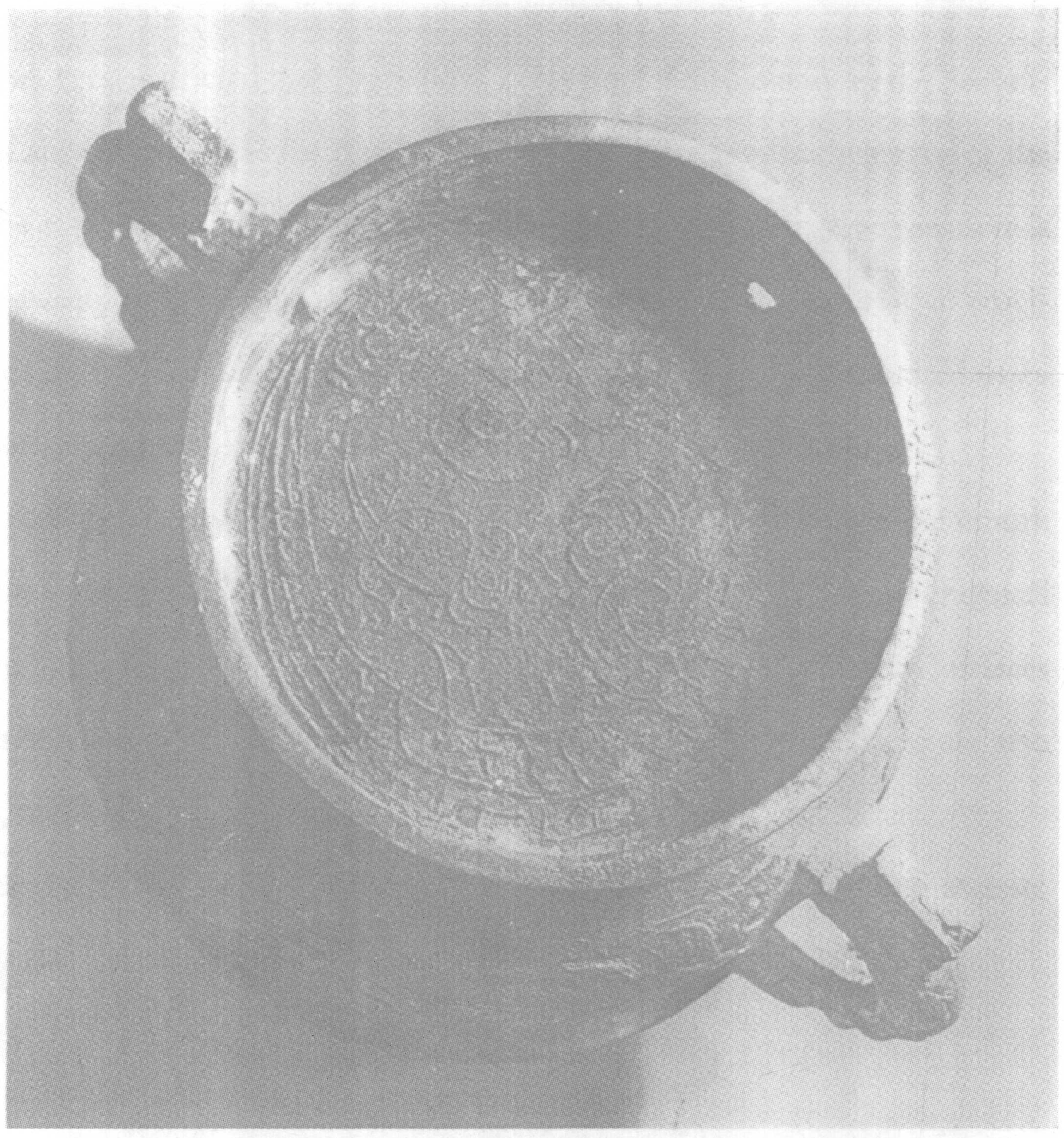
Accession number: 26.1827

PLATE XV



TSUN *Top view and detail of head*

PLATE XVII



KUEI *Decoration on base*

PLATE XVI



KUEI *Front view*

FOOD VESSEL *TING*

Shang Dynasty

This *ting*, one of the most common of all ceremonial types, is an unusually fine example. Once in the collection of Tuan Fang, it seems to have long been a collector's piece, for the shiny "tea-dust" surface of deep brownish green witnesses the stroking of the hands of generations of patient servants of discriminating collectors. The outstanding feature of this *ting* is doubtless the perfect balance between the powerful decoration and the sturdy proportions of the piece itself. We see here a classic example of the *t'ao-t'ieh*. On the inside wall is the character, "Ping(?)."

Total height:	9⅝ *inches* (24.4 *cm.*)
Diameter of rim:	7 7/16 *inches* (18.9 *cm.*)
Accession number:	28.167

PLATE XVIII



KUEI *Details of handles*

FOOD VESSEL *KUEI*

Early Western Chou Dynasty

Though many examples of the *kuei* are known which stand on a high base, such as this, only a few have a loop underneath the bottom of the cup from which a bell was suspended. This *kuei* has the loop still solidly in place, but the bell has disappeared.

The vigorous decoration in very high relief is one of the best examples of the art of early Chou, though retaining some of the Shang characteristics in such a way as to enable us to give a close estimate of its date. The handles are a striking composite of bird and beast. An inscription is cast inside the bottom of the cup stating that Chung-ch'eng made this precious vessel for the king's use at home and abroad.

Height:	10¾ *inches* (27.0 *cm.*)
Diameter at lip:	8¾ *inches* (22.2 *cm.*)
Accession number:	27.316

PLATE XIX



TING

PLATE XXI



KUEI *Side view*

PLATE XX



KUEI *Front view*

WINE VESSEL *TSUN*

Early Western Chou Dynasty

This noble *tsun* is of superb casting with ornament sharply defined. It is of silvery color, the exposed surfaces probably very nearly in their original condition, and there are patches of incrustation of malachite and azurite. The masks on the neck are composed of very spirited crested birds.

The bottom is rounding, set considerably above the base, and inside bears an inscription reading:

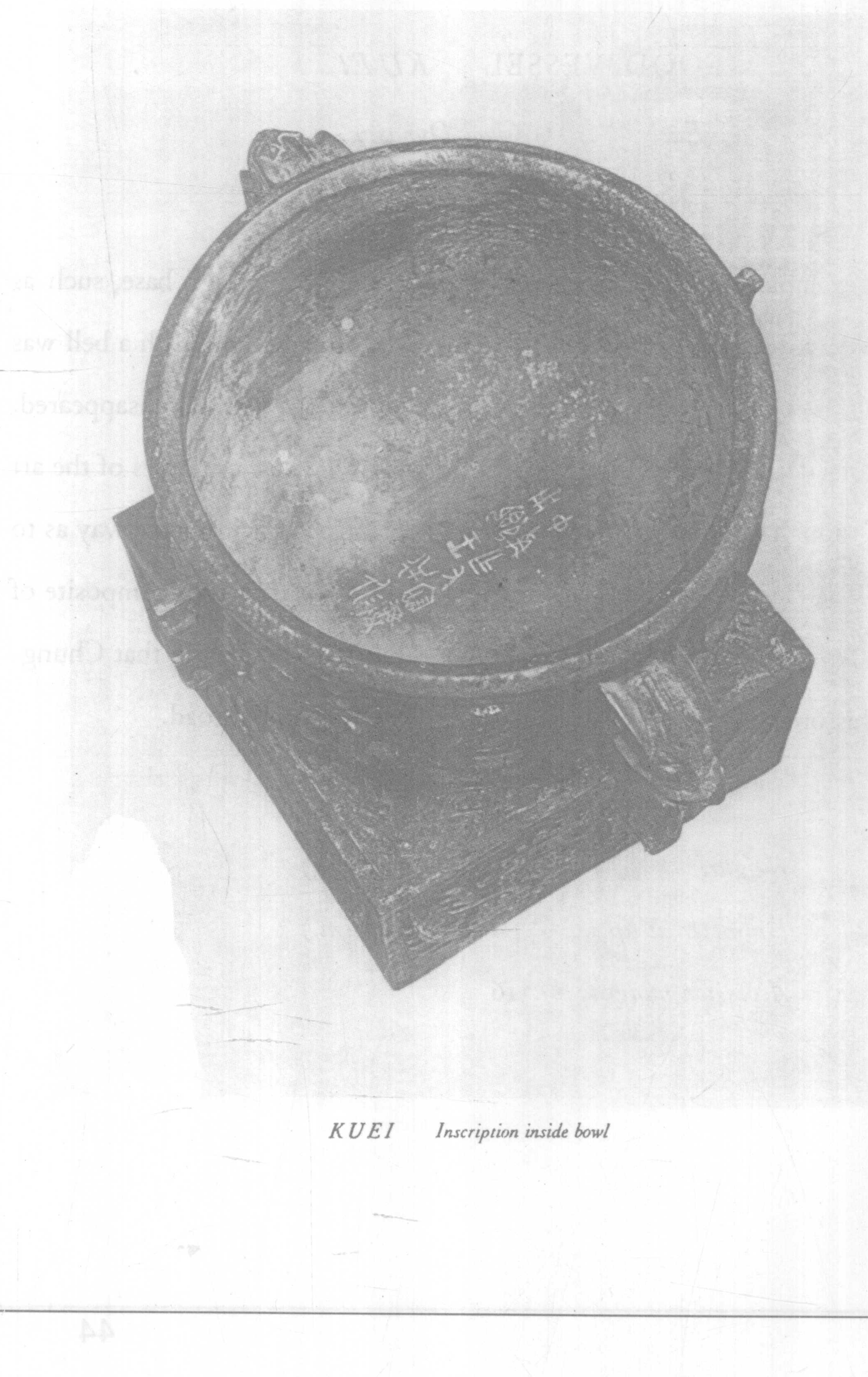
"Chien made (this) precious sacrificial vessel."

Height: 11⁷⁄₁₆ *inches* (29.1 *cm.*)

Diameter: 8½ *inches* (21.6 *cm.*)

Accession number: 36.138

PLATE XXII



KUEI *Inscription inside bowl*

WINE VESSEL *FANG I*

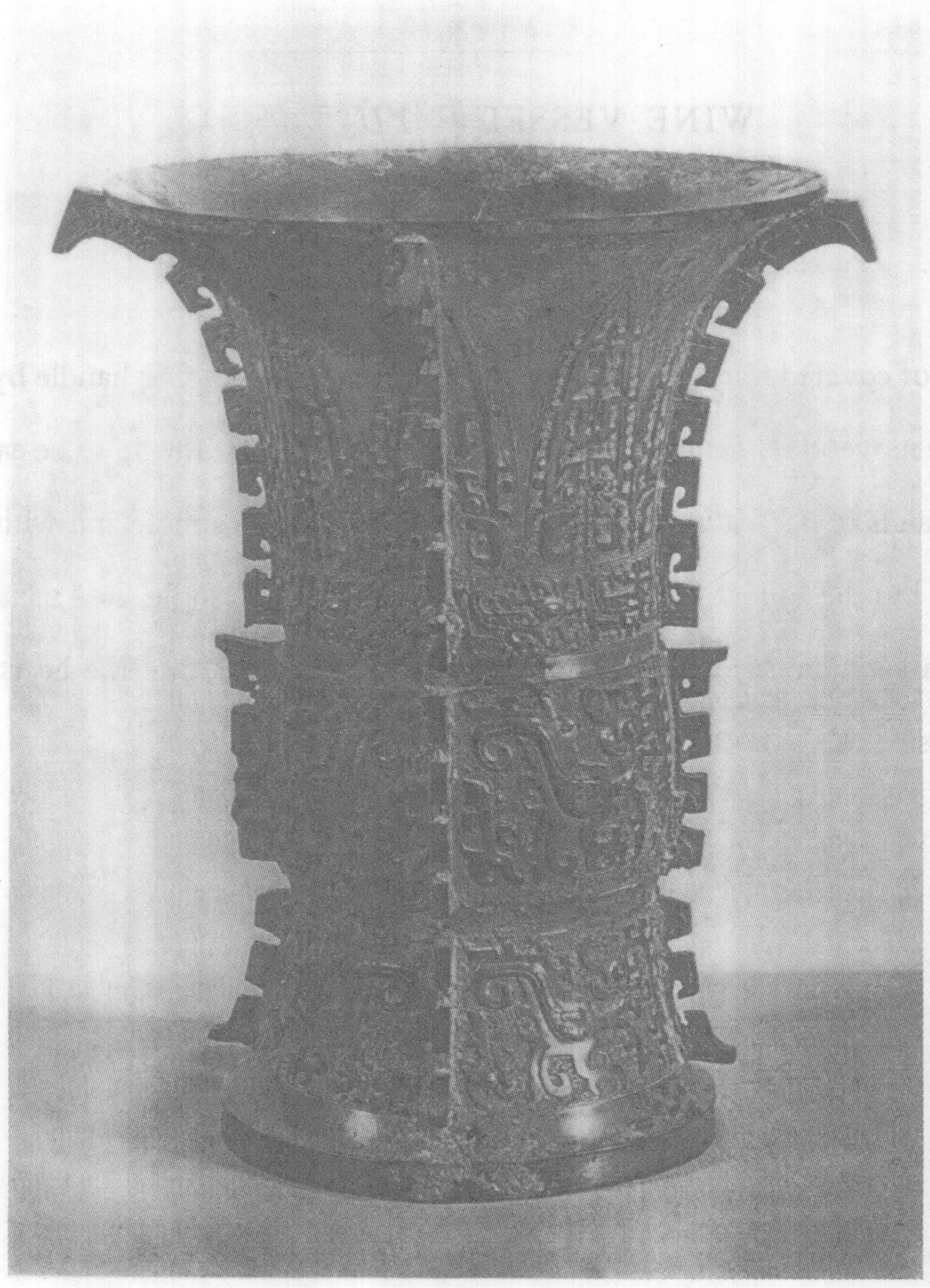
Early Western Chou Dynasty

A striking form of solemn splendor is this *fang i*, heavy, solid, and every inch alert in its springing lines. The fins, or ornamental ridges defining the surfaces, are very carefully designed, showing an unusual combination of the solid and serrated types. The lid, as with our *lei* (pl. IX), bears *t'ao-t'ieh* masks, which are reversed in direction from those in normal position on the body below. The patination varies from olive green to light malachite, with a few reddish areas. The character of the ornament is crisp and clear. An important inscription in the lid is repeated in the body below. It is translated:

"Yung Tzŭ made (this) precious sacrificial vessel."

Total height: 12⅞ *inches* (32.8 *cm.*)
Length of body: 7¼ *inches* (18.4 *cm.*)
Width of body: 5⅝ *inches* (14.4 *cm.*)
Accession number: 32.971

PLATE XXIII



TSUN

PLATE XXV



FANG I *End view*

PLATE XXIV



FANG I *Three-quarter view*

WINE VESSEL *YU*

Early Western Chou Dynasty

The *yu* is a sort of covered bucket with close-fitting cover. Its swinging handle by an ingenious device moves only far enough in each direction to permit the lid to be easily removed. The bands of decoration on lid and body of our *yu* are simple and without much invention, but the animals' heads are very expressive. The handle, as is usual, is decorated with a geometrical pattern. The inscription on the inside of the lid is repeated on the inside of the bottom and is translated:

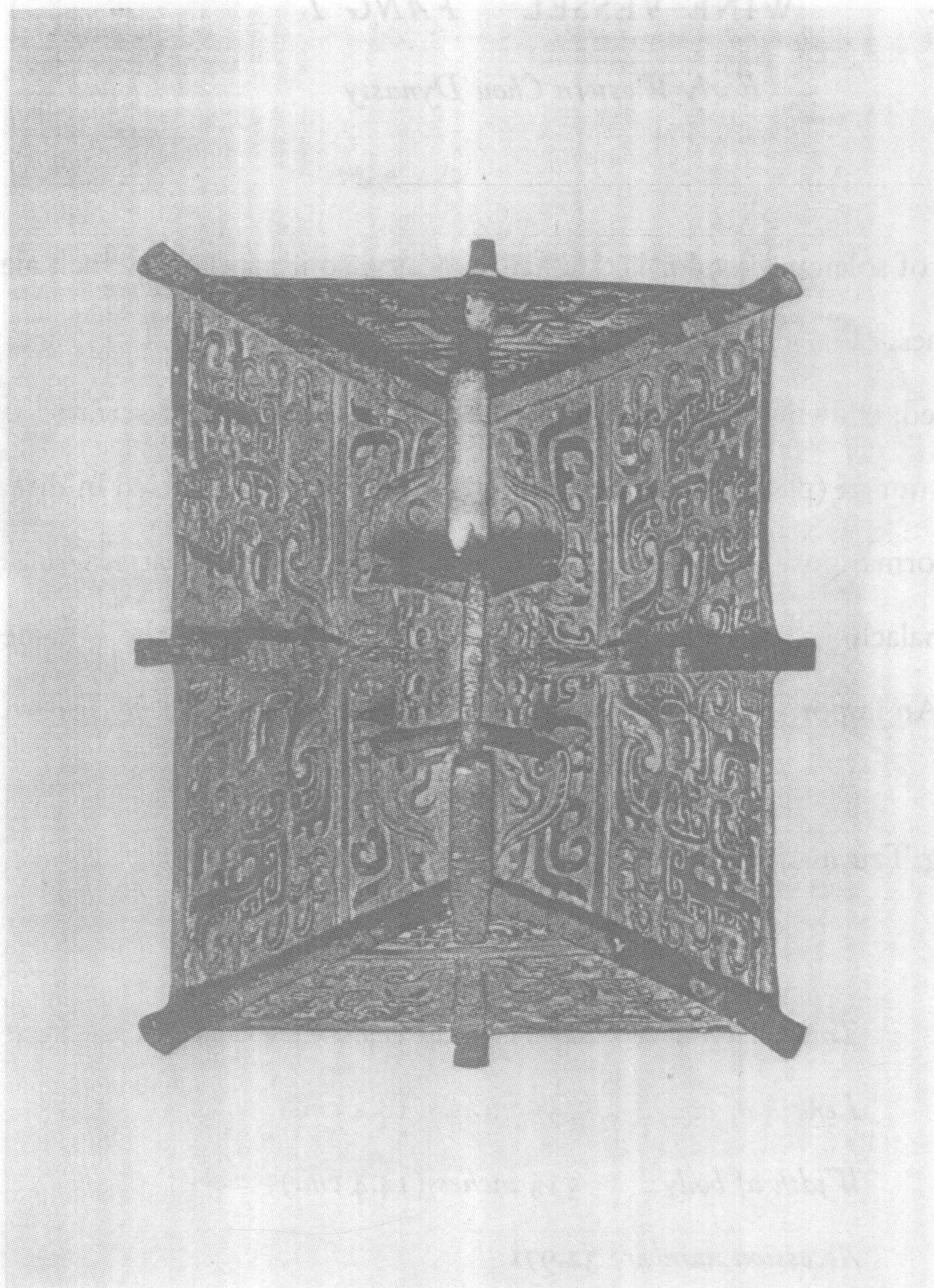
"(For) Father K'eng of the Tzŭ clan."

Height to top of knob: 12 1/6 *inches* (30.8 *cm.*)

Width across animals' heads: 9 7/8 *inches* (25.1 *cm.*)

Accession number: 27.602

PLATE XXVI



FANG I *Lid*

FOOD VESSEL *KUEI*

Early Western Chou Dynasty

This handsome *kuei* has suffered many vicissitudes in nearly three thousand years of existence, but in places the original surface is preserved; the decoration is unusually fine in character, and lid and body bear inscriptions of singular importance. The inscriptions are identical and are still very sharply defined. This is an early example of the ceremonial vessel of double purpose, for the inverted lid, resting firmly on its round foot, makes a second dish. Within the foot of the lid is an incised dragon, similar in character to the early jades. The exposed surface, which has been freed from corroding incrustations, has a whitish tint closely resembling German silver. The translation states that Ming made the vessel to commemorate a gift of deer from the king.

Total height: 9½ *inches* (24.1 *cm.*)

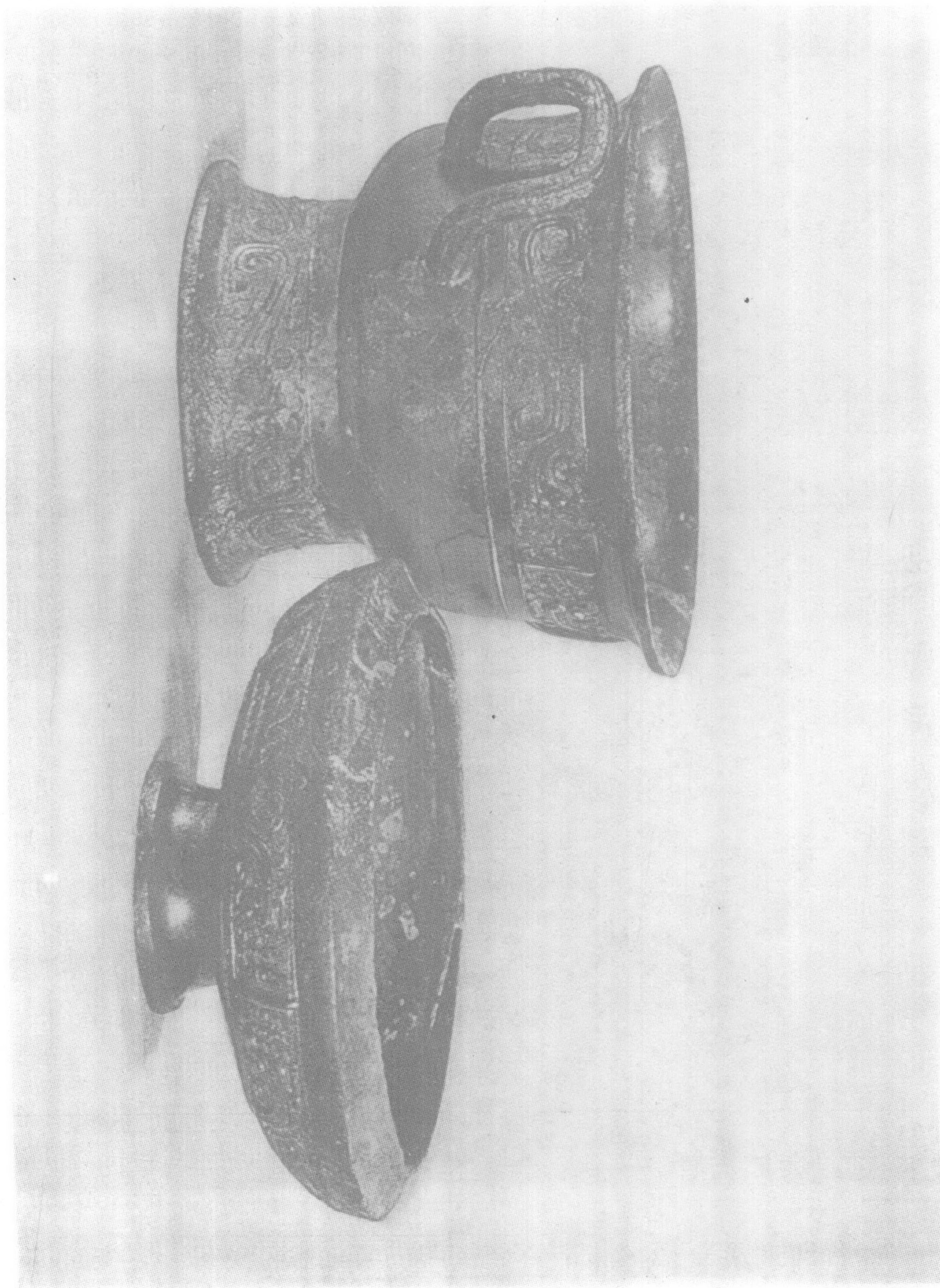
Diameter: 8½ *inches* (21.6 *cm.*)

Accession number: 27.1432

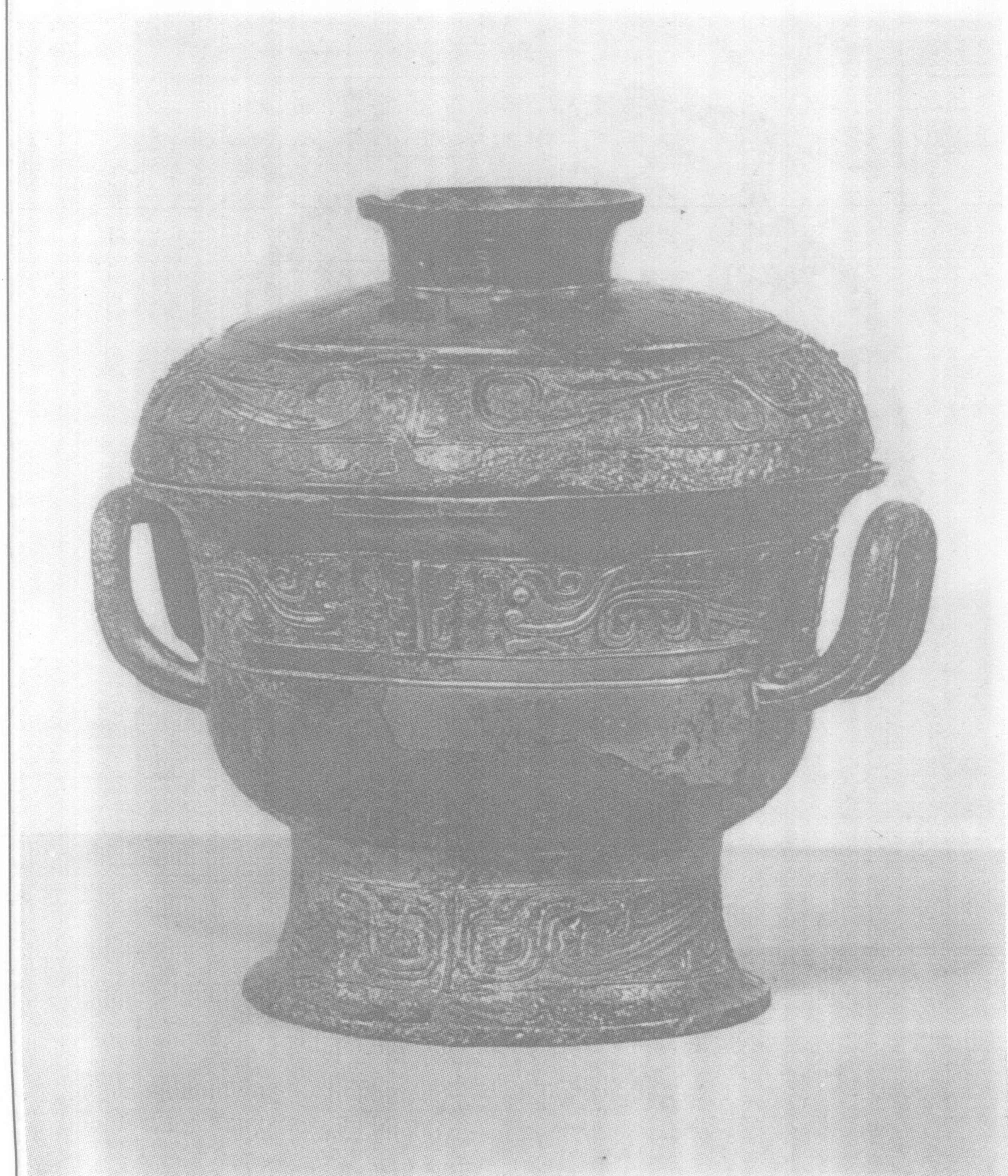
PLATE XXVII



YU



KUEI *Lid removed*



KUEI

COVERED FOOD VESSEL *HSÜ*

Late Western Chou Dynasty

The majority of students of Chinese bronzes would unhesitatingly place this *hsü* at the head of all examples of its type. Not only does it fulfill every requirement of such a vessel as regards integration of design with function, but it epitomizes the characteristics of Chou design as differentiated from Shang. The lid serves as an extra dish with rounded bottom, and both lid and body bear identical inscriptions of unusual importance. Decorative motifs are skilfully adapted to their areas, and the rounding ovoid forms are repeated in the treatment of the animal-headed handles. The general coloration is a greenish brown, with slight incrustations of gray-green. The inscription states that K'ê, an official, caused the bronze to be made for the sacrifices and entertainment of a high official who, at the king's command, had made records of K'ê's field workers.

Total height:	7¾ *inches* (19.9 *cm.*)
Width (*excluding handles*)*:*	8⅜ *inches* (21.3 *cm.*)
Accession number:	28.144



KUEI *Lid*

PLATE XXXII





HSÜ *End view and with lid removed*

PLATE XXXI



HSÜ *Side view*

WINE VESSELS *HU*

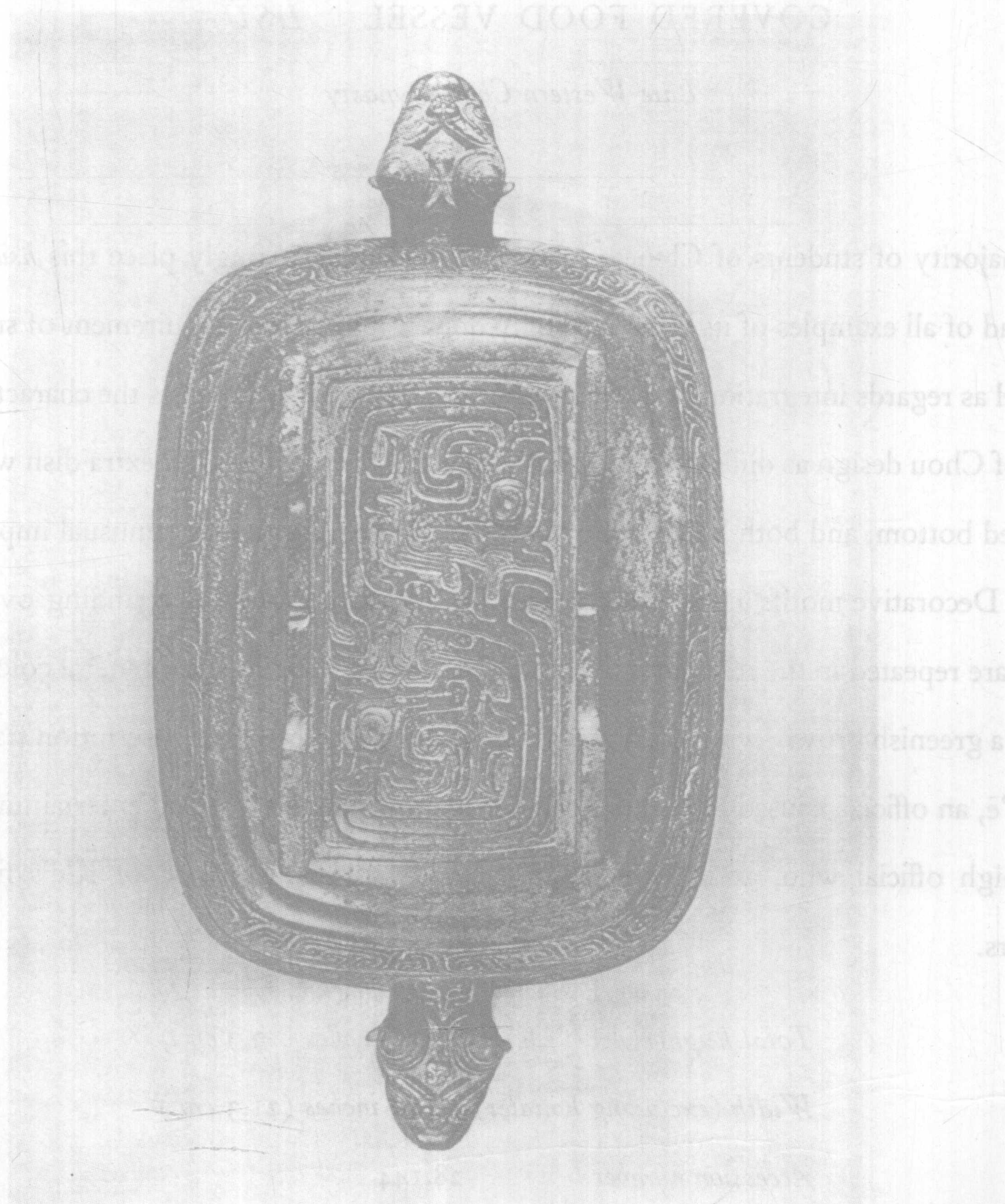
Late Western Chou Dynasty

This powerfully designed type of *hu* sets a pattern that has retained its appeal to Chinese taste through many centuries. These pieces with their massive though highly stylized and simplified surface patterns could never be confused with the earlier forms. A new element is unmistakably present in the art of Late Western Chou. There is a savage intensity to the interlacing motifs which never degenerates into mere arabesques. These jars originally had lids.

A thin gray-green granular patination covers the surfaces.

Height:	20 1/16 *inches* (50.5 *cm.*)
Width:	14 5/16 *inches* (36.4 *cm.*)
Accession numbers:	24.233 and 24.234

PLATE XXXIII



HSÜ *Top view*

PLATE XXXV



HU *End view*

PLATE XXXIV



HU *Three-quarter view*

WATER VESSEL *P'AN*

Late Western Chou Dynasty or later

Crudely modeled, in comparison with many of our other bronzes, this basin has some curious features. Though there are three feet, there are but two handles, and the little squatting human figures which support the basin are most unusual in design. They are nude, one male, one female, and the third indeterminate on account of corrosion. The heads do not seem Chinese in character, and perhaps indicate slaves of different race. In spite of harsh transitions there is a dash to the curves of the biting dragon handles which contributes to the very lively impression of the entire piece.

The surface is much pitted and corroded and varies in shades of greenish brown.

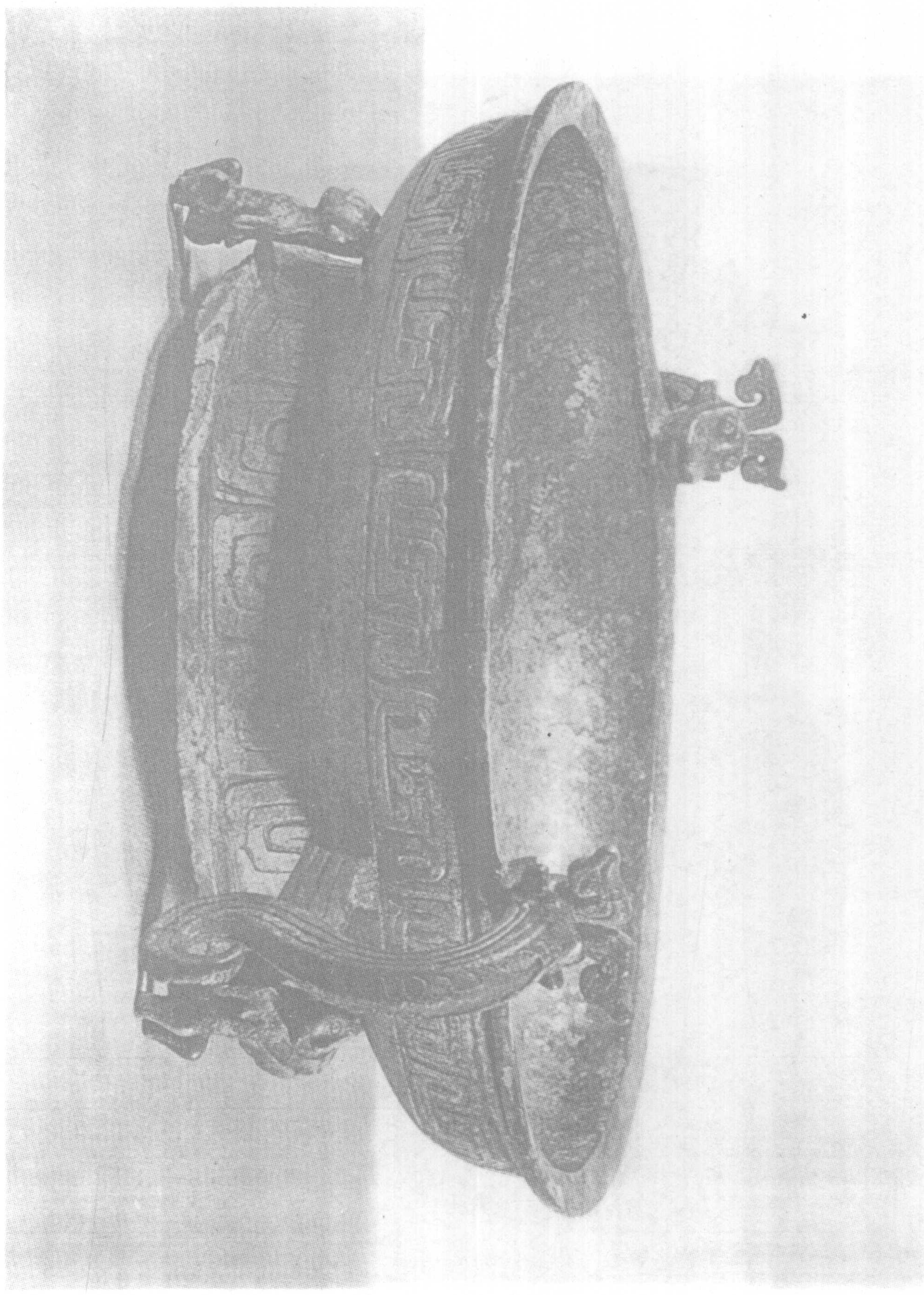
Height at edge: 5½ *inches* (13.7 *cm.*)
Diameter: 16½ *inches* (41.8 *cm.*)
Accession number: 29.647

PLATE XXXVI



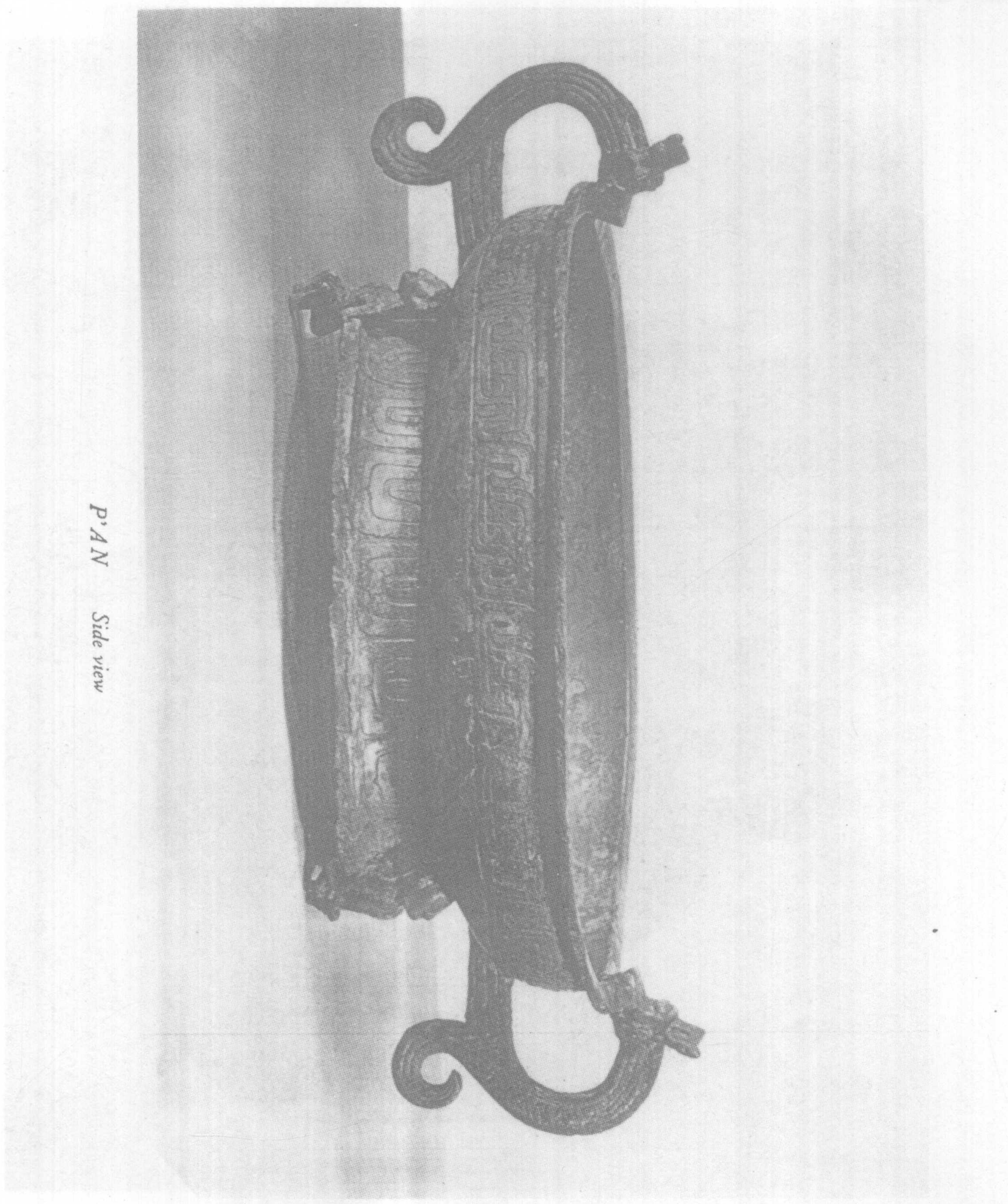
HU *Details*

PLATE XXXVIII



P'AN Three-quarter view

PLATE XXXVII



P'AN Side view

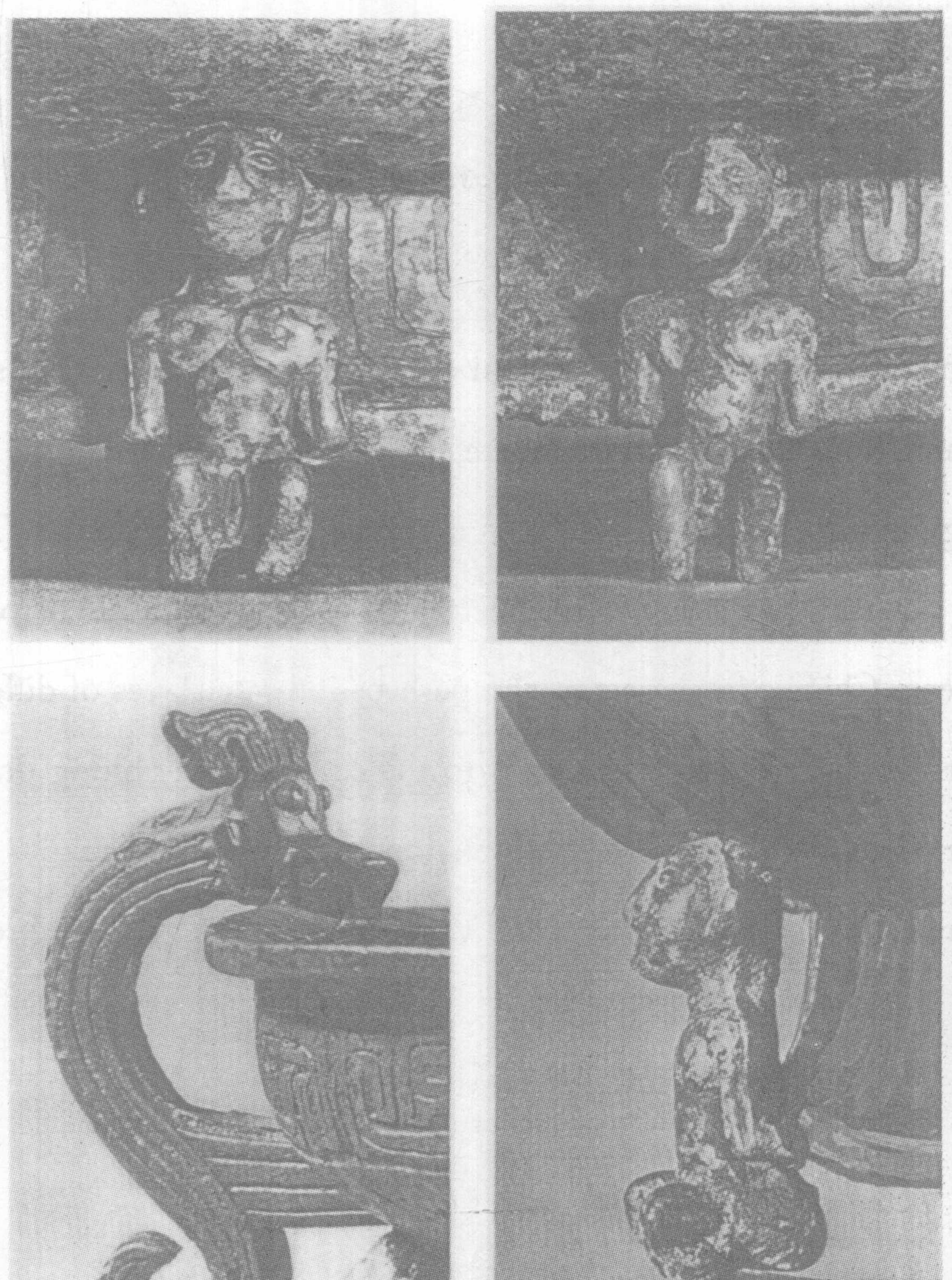
MASK

Eastern Chou Dynasty or earlier

The holes on the edge of this mask indicate that it was attached to some surface, possibly a chariot. At any rate, its menacing expression would make it very suitable for such a purpose. It is made from a uniformly thin sheet of bronze and was probably beaten in a mold. The surface is rough, ranging in color from strong green to reddish gray.

Height:	10½ *inches* (26.4 *cm.*)
Width:	12⅞ *inches* (32.2 *cm.*)
Thickness:	3/32 *inch* (0.3 *cm.*)
Accession number:	30.364

PLATE XXXIX



P'AN Details

MASK

Eastern Chou Dynasty or earlier

This mask is made from a sheet of bronze of uniform thickness. It could have been beaten out directly, but probably was hammered in a mold. Perforations about the edge indicate that it was made for attachment to something,—perhaps a chariot, where it should strike terror to opponents. Here is a chance for endless speculations as to its relationship to the *t'ao-t'ieh.*

The surface is slightly rough, grayish green with some incrustation and areas of reddish gray.

Height:	10⅜ *inches* (26.5 *cm.*)
Width:	10¾ *inches* (27.5 *cm.*)
Thickness:	3/32 *inch* (0.3 *cm.*)
Accession number:	30.365



MASK

PAIR OF MASKS

Eastern Chou Dynasty or earlier

These masks were made for attachment through the holes in the edge to some unknown object. They are of sheet metal probably beaten in a mold.

Length:	11⅞ *inches* (30.2 *cm.*)
Greatest diameter:	8 13/16 *inches* (22.4 *cm.*)
Thickness:	1/6 *inch* (0.2 *cm.*)
Accession numbers:	31.3 and 31.3a



MASK

BELL *CHUNG*

First Half Eastern Chou Dynasty

This bell is a variant of the flattened barrel-shaped bells without clappers which were a favorite Chinese form.

Our bell is unusual in the crisp thread-like design on its surface. The strange crawling creatures on the upper and lower bands are unique in our experience.

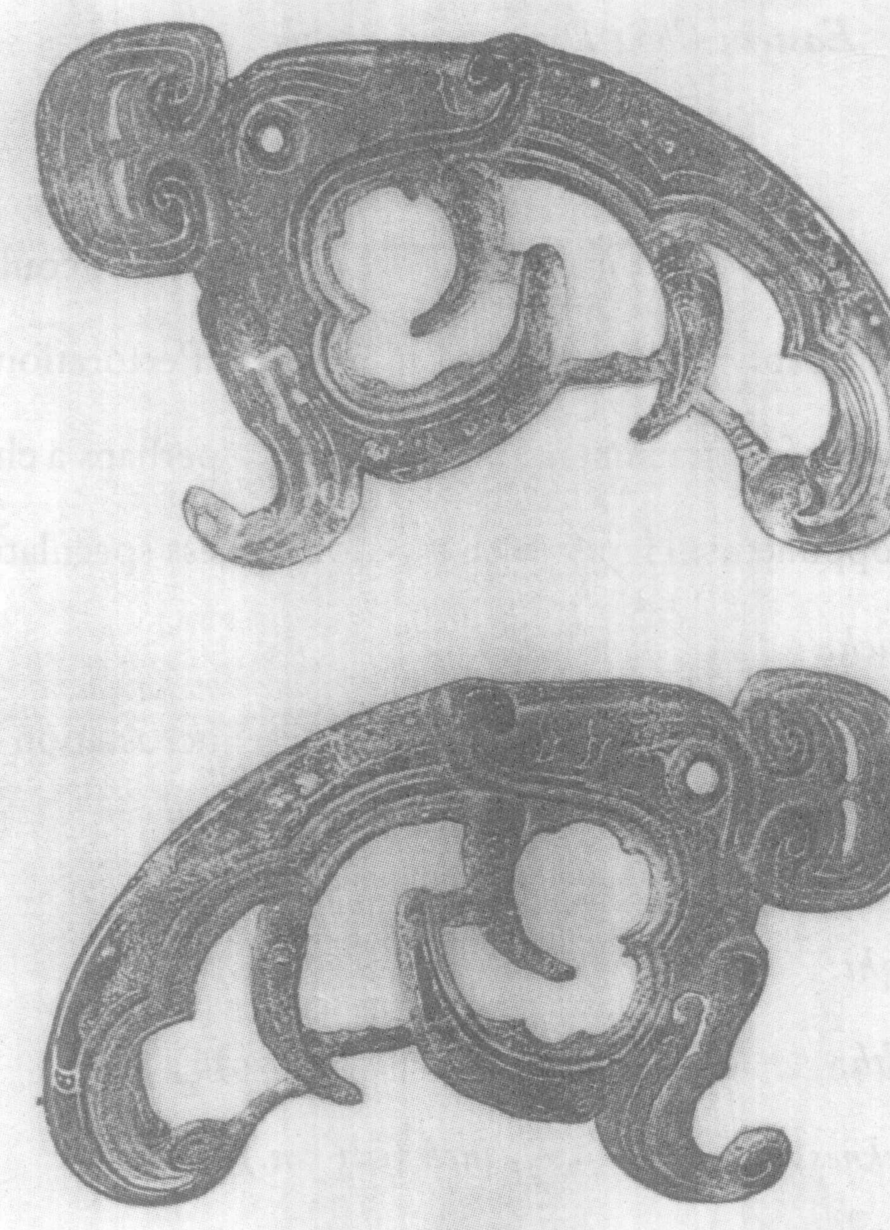
The bell has become largely mineralized and is malachite green in color.

Height: 16½ *inches* (41.7 *cm.*)

Width: 11⅜ *inches* (28.9 *cm.*)

Accession number: 24.243

PLATE XLII



PAIR OF MASKS

BELL *PO*

First Half Eastern Chou Dynasty

Bells of this shape, crowned with fantastic animals, are plentiful indeed in China, but one of this quality surmounted by birds' heads instead of routine dragons, exquisitely proportioned, and instinct with life and vigor, is rare indeed: in fact very few bells of this type are known.

The crested birds' heads devouring their own bodies and buttressed by spreading wings, are of the tremendous strength and solidity essential to crown so massive a design. The bosses studding the surface of the tone chamber are no mere roundels, but coiled serpents, compact and forbidding. The arabesques on the bands and the lower part of the bell are nicely adjusted to enrich simple surfaces. This type of bell was struck on the outer surface to produce a tone. The patina varies from blue to yellow-green, with patches of reddish deposit.

Height: 24½ *inches* (62.2 *cm.*)

Width: 17 3/16 *inches* (43.6 *cm.*)

Thickness: ½ *inch* (1.3 *cm.*)

Accession number: 38.1335

PLATE XLIII



CHUNG

PLATE XLV



PO Detail of top

PLATE XLIV



PO

FOOD VESSEL *LU*

Eastern Chou Dynasty

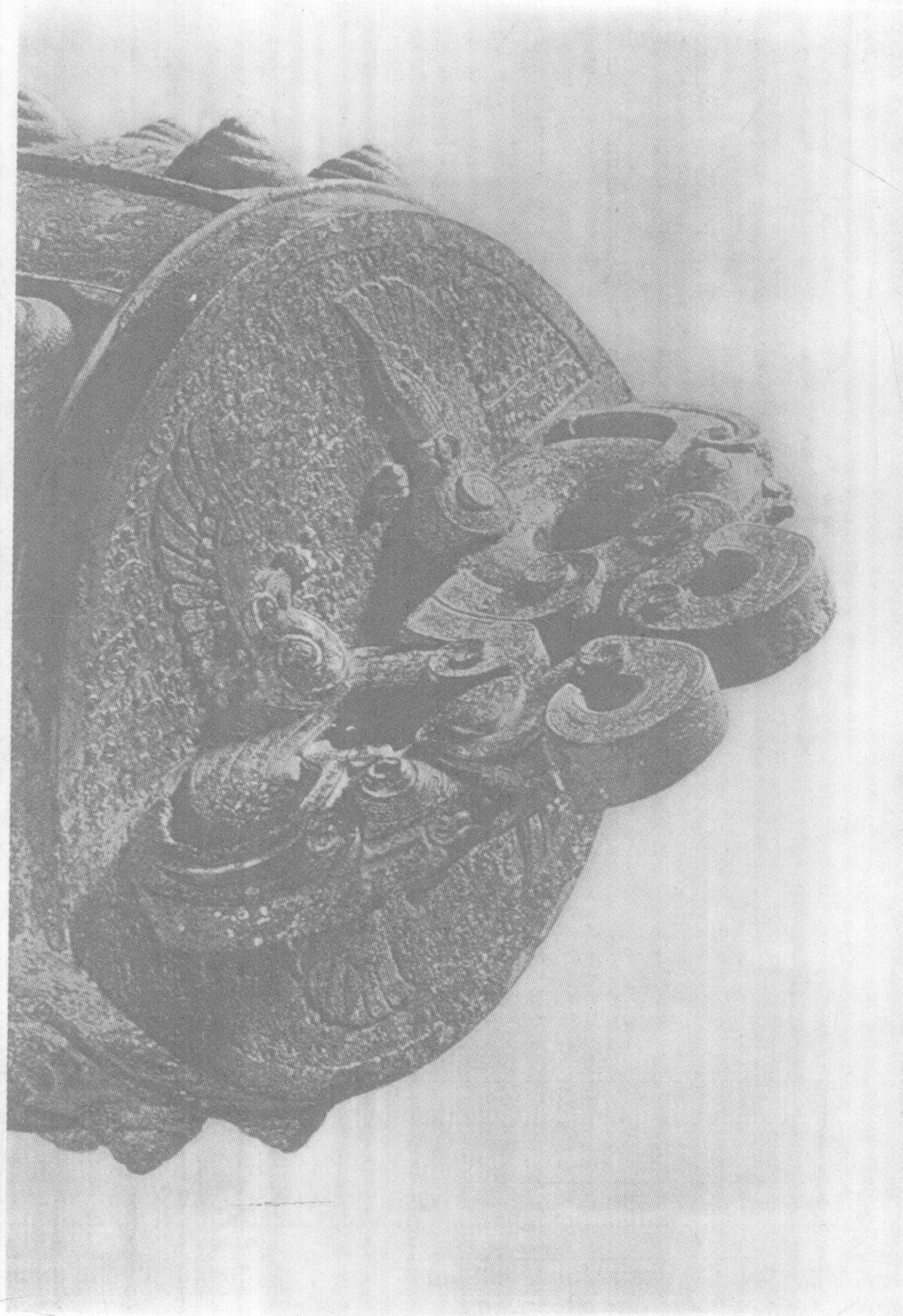
The lively supporting figures, the brilliant blue patination, the sturdy chain handles, combine to make this censer a remarkably attractive piece. The little figures with top-knots and heavy quilted coats girt about the waist, in their tall felt boots are quite like the Mongols of today. Even the pattern of the quilting may be seen on the skirts of the coats. The molds from which the decorated sides were formed were handsomely executed, but the casting as regards the mold junctions is somewhat careless. The surface is incrusted with a light brownish deposit, deeply stained and alternating with bright azurite.

Height: 4 5/16 *inches* (10.9 *cm.*)

Diameter: 10 1/4 *inches* (25.8 *cm.*)

Accession number: 29.648

PLATE XLVI



PO Detail of top

DOUBLE FOOD VESSEL *FU*

Eastern Chou Dynasty

Of a very rare type, this superb double ceremonial dish is one of the outstanding pieces of the Buckingham Collection. In proportions, quality of casting, condition, and beauty of color it leaves nothing to be desired.

In the art of no other nation do we find such an original combination of angles and curves, and indeed, this type of *fu* is sharply differentiated from all other Chinese bronzes. The entire surface, except for the under side of the base, is covered with a delicate vermiculated pattern based on the cloud scroll, and produced by direct casting, not engraving. This demonstrates a continuous mastery of the *cire perdu* process, in use for centuries.

The surface of the bronze is largely azurite, varying to malachite, caused by mineralization of the metal.

The lid is exactly the same as the base except for the small projecting masks at the edge, which hold it in place.

Height: 7 5/16 *inches* (18.6 *cm.*)

Length: 13 1/8 *inches* (33.3 *cm.*)

Width: 8 1/2 *inches* (21.6 *cm.*)

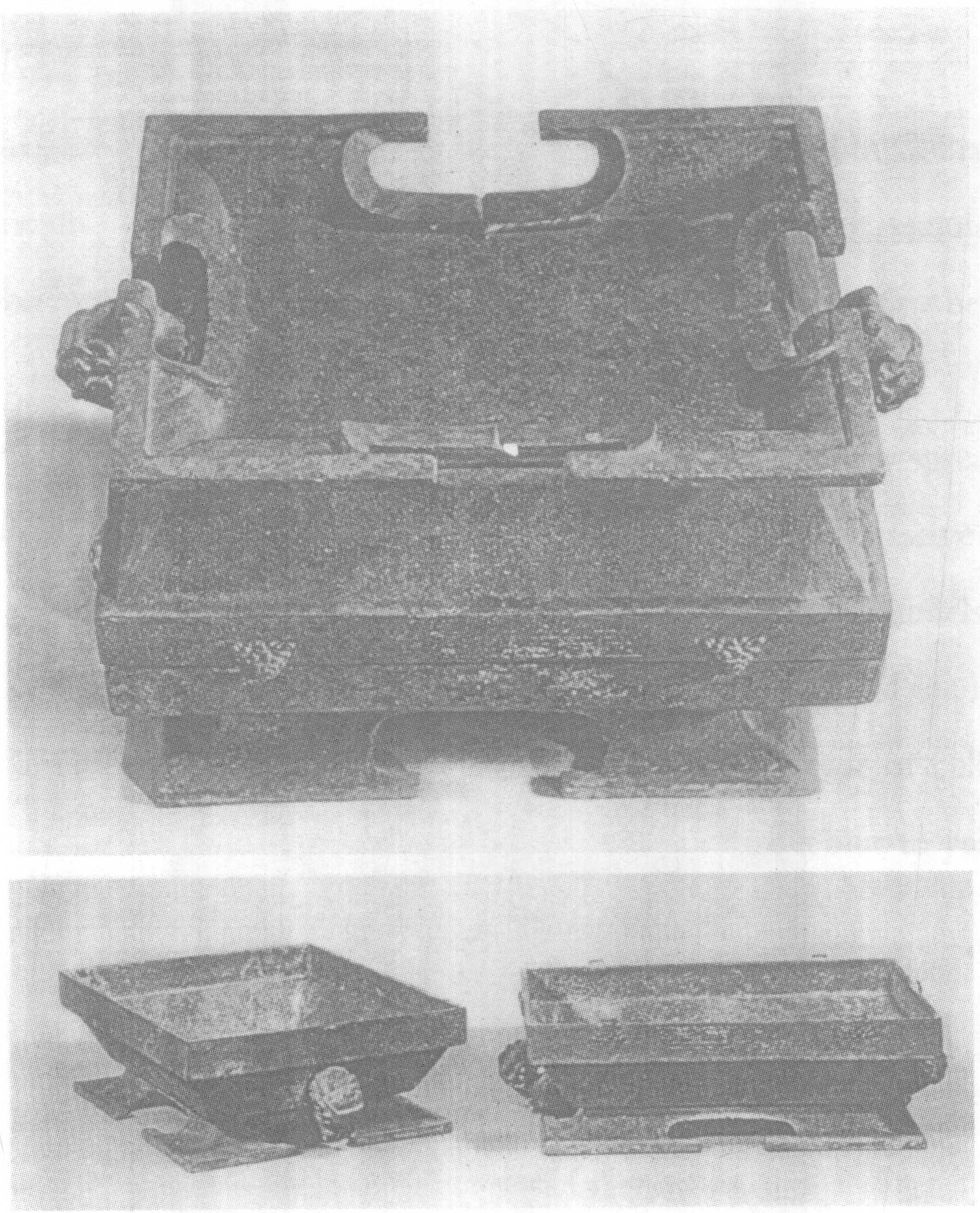
Accession number: 24.242

PLATE XLVII



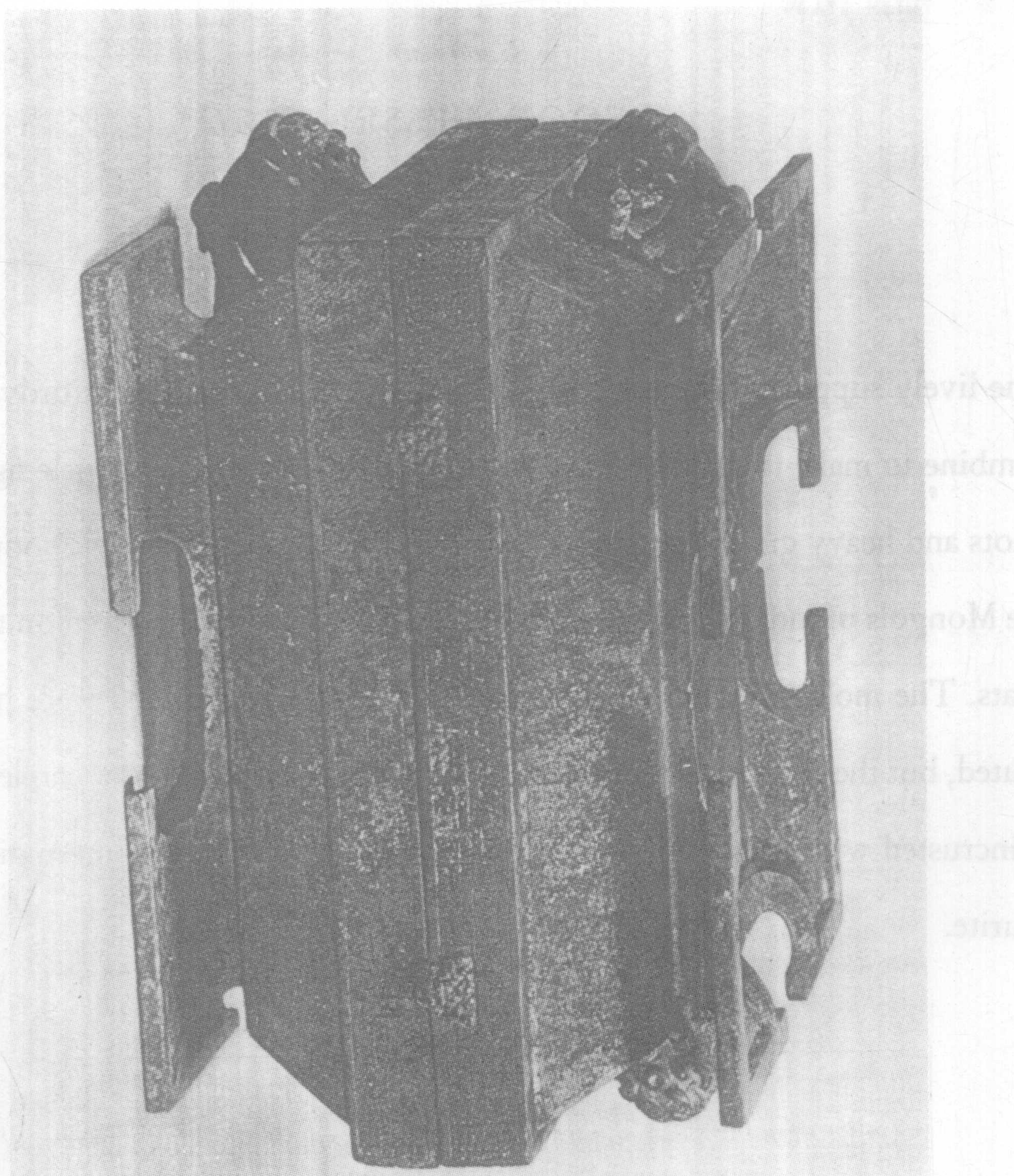
LU

PLATE XLIX



FU *Details*

PLATE XLVIII



FU *Side view*

WATER VESSEL *CHIEN*

Eastern Chou Dynasty

Very impressive is this large basin with sturdy, ornate handles, molded rope-like bands and intertwined arabesques typical of its period. The basin was cast in a three piece mold, and is somewhat warped, perhaps due to conditions of burial. The continuous pattern on the ring pendants is much like that to be found on jade *p'i*. In later times the pendant ring develops into the principal handle, and the animal mask, here the true handle, is relegated to the minor role of attaching the lifting rings to the body of the vessel. This can be seen in two gilt bronze *hu*, illustrated later in this volume.

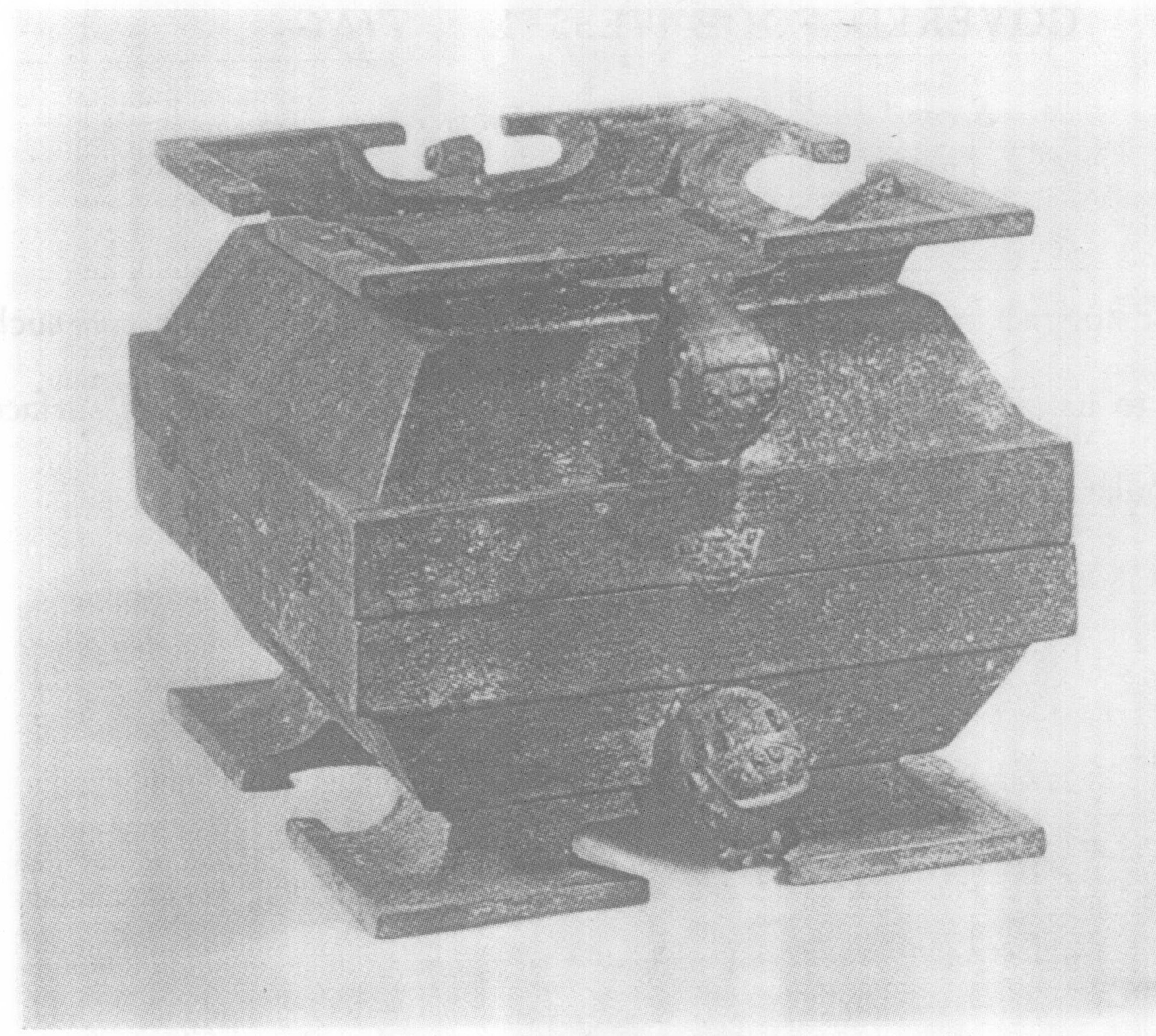
The patination varies from azurite to soft gray-green.

Height: 11½ *inches* (29.5 *cm.*)

Diameter: 23½ *inches* (59.6 *cm.*)

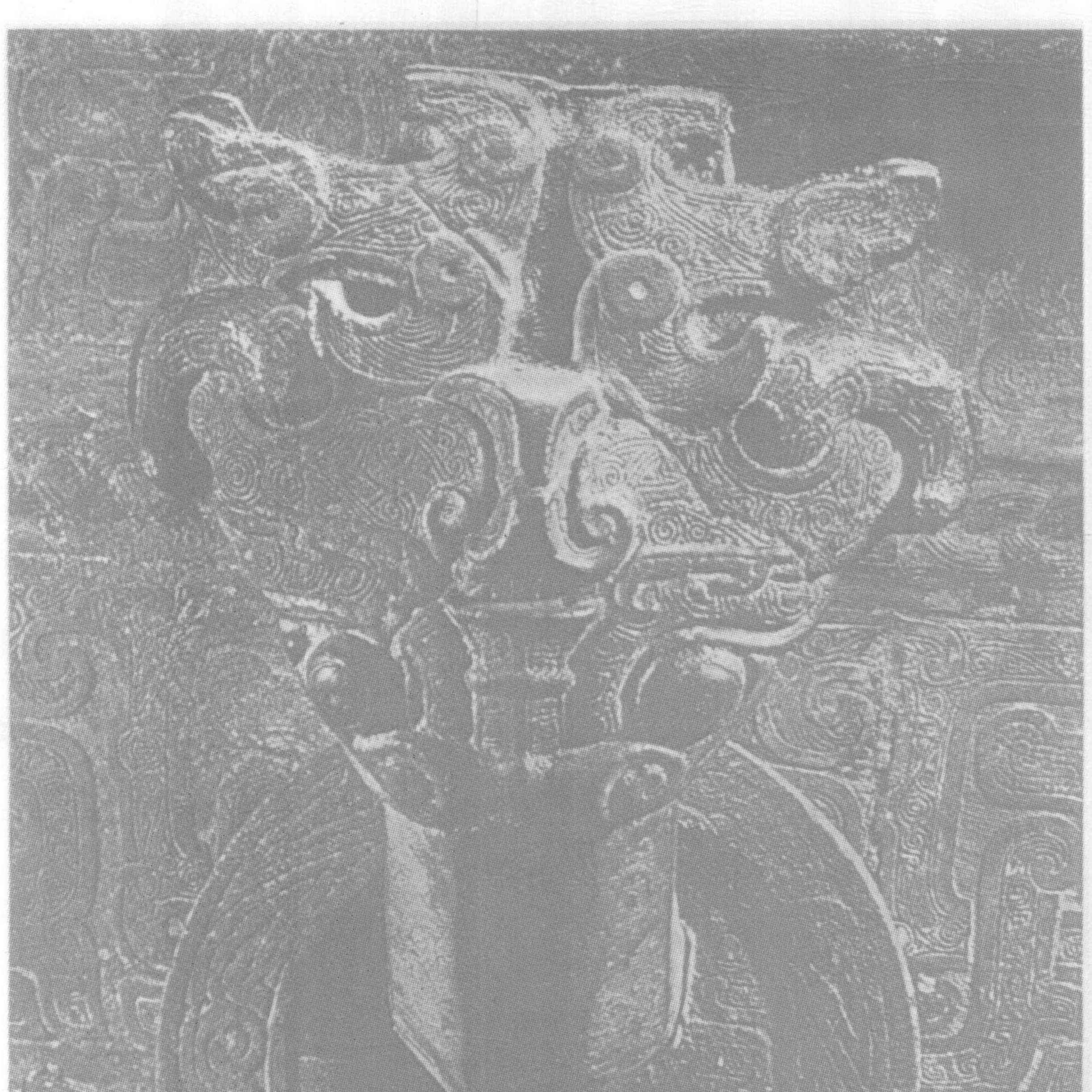
Accession number: 30.704

PLATE L



FU *End view*

PLATE LII



CHIEN *Handle*

PLATE LI



CHIEN

COVERED FOOD VESSEL *TING*

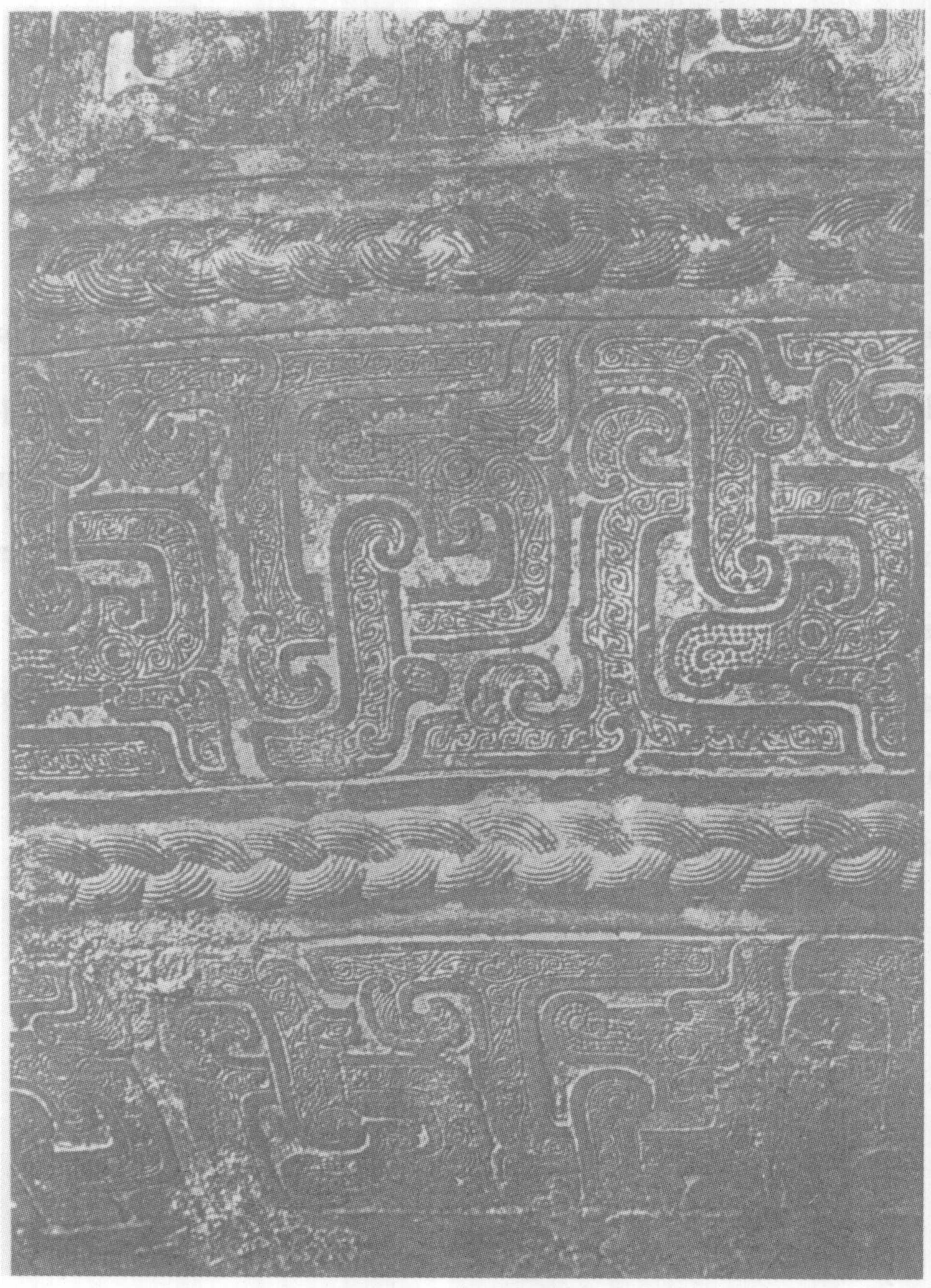
Second Half Eastern Chou Dynasty

This *ting*, rather sluggish in form, and without the decoration in relief which gave such vital character to its ancestors, is nevertheless a fine recording of the flat surface patterns so popular in late Chou times.

The patina is mottled brown and greenish gray.

Height: 13¼ *inches* (33.6 *cm.*)
Diameter: 13⅜ *inches* (34.0 *cm.*)
Accession number: 26.384

PLATE LIII



CHIEN *Surface pattern*

PLATE LV



TING *Side view*

PLATE LIV



TING *Front view*

PILGRIM BOTTLE *PIEN HU*

Second Half Eastern Chou Dynasty

Pilgrim bottle is the somewhat lyric term applied to an extremely useful beverage container which we know as the "canteen." It is classified as a form of *hu*, a storage jar for wine, and varies greatly in size. This monumental pilgrim bottle, inlaid with copper, and crisply stamped with delicate patterns in high relief, is an excellent example.

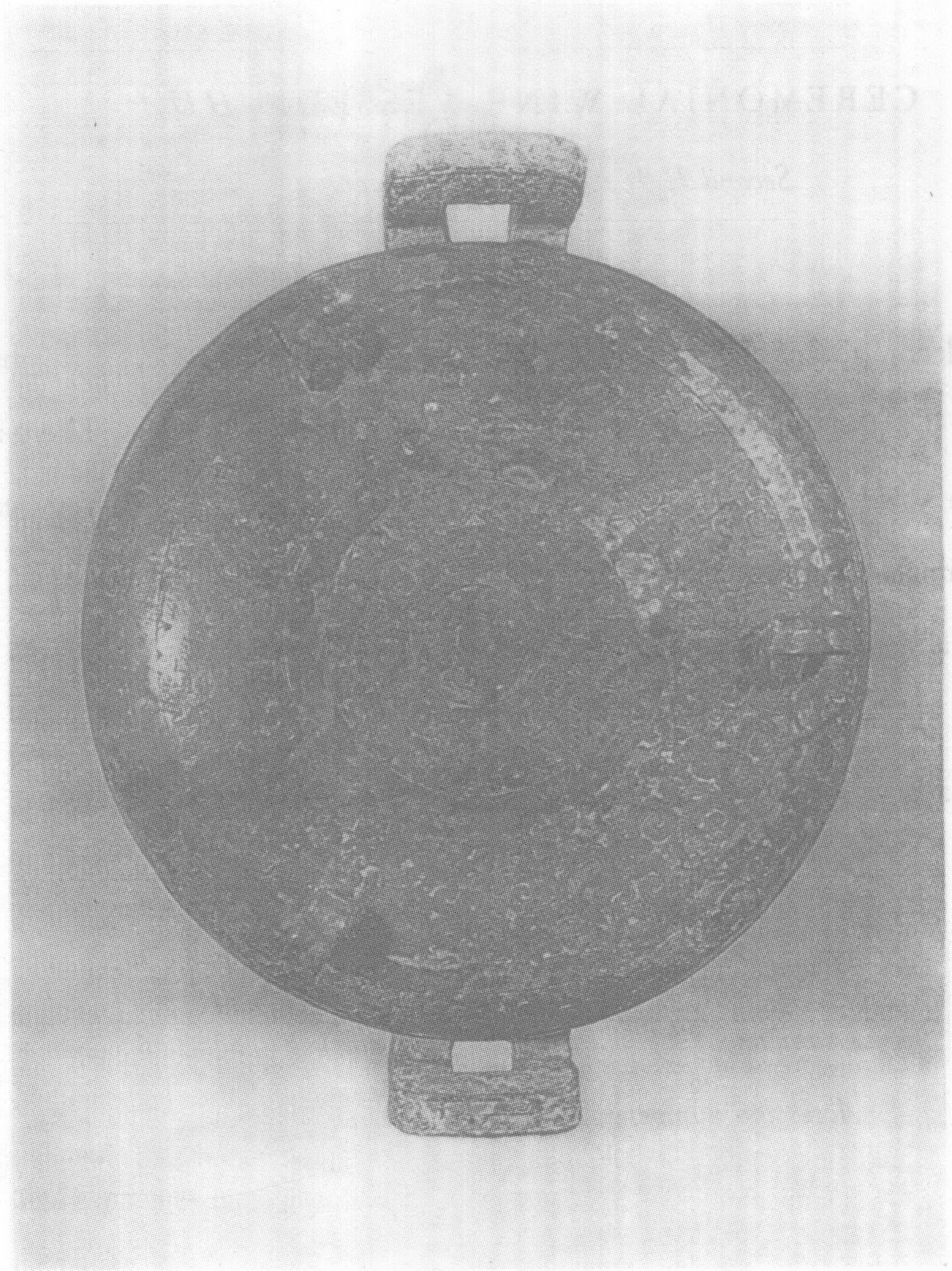
The patina is a dull green with patches of malachite.

Height: 14¼ *inches* (36.2 *cm.*)

Width: 13¼ *inches* (33.7 *cm.*)

Accession number: 37.1

PLATE LVI



TING Top view

MIRROR *CHING*

Late Eastern Chou Dynasty

This mirror is a good example of the intricate cast pattern of Late Eastern Chou, superbly adjusted into areas bounded by simple slightly concave bands. Though perfectly characteristic of its period it does not fall into any of the better known design categories, evidently being made for purely esthetic reasons, without any ritualistic significance.

Diameter: 6⅝ *inches* (16.8 *cm.*)

Thickness at edge: ¼ *inch* (0.6 *cm.*)

Thickness at boss: 7/16 *inch* (1.2 *cm.*)

Accession number: 37.124

PLATE LVII



PIEN HU

CEREMONIAL WINE VESSEL *HU*

Second Half Eastern Chou Dynasty

The striking decoration of animal motifs inlaid in copper on the surface of this handsome *hu* gives it a place of honor among all early monumental wine jars. There is an unusually fine variety of treatment with three distinct types of form: very easily recognized animals, definitely geometrical patterns, and between these extremes, animals that are half geometry. These decorations wrap themselves about the jar in a way which adds to the feeling of compact form.

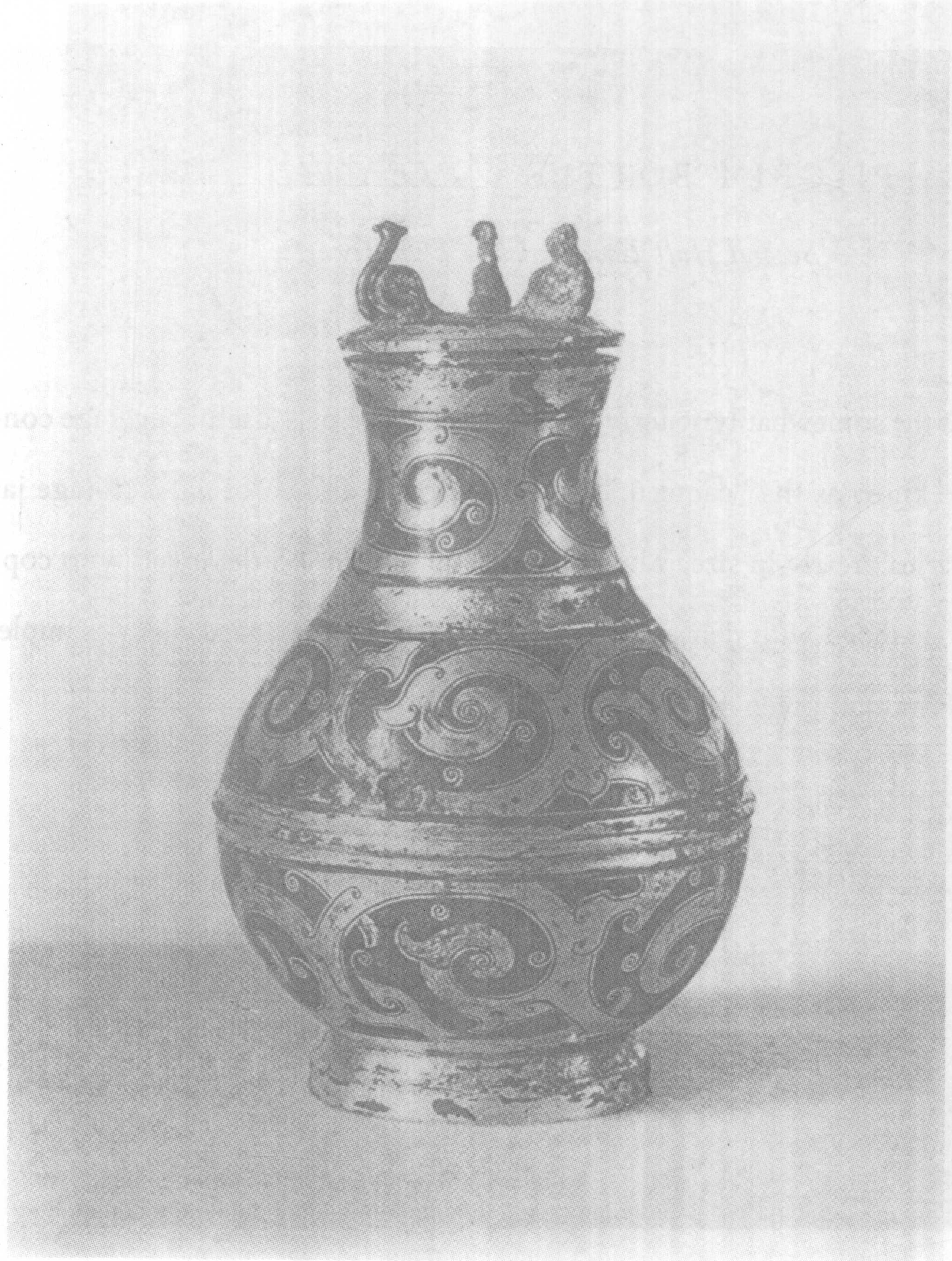
The patina is yellowish brown, with greenish corrosions and incrustations.

Height: 17⅝ *inches* (44.7 *cm.*)

Diameter: 12 *inches* (30.6 *cm.*)

Accession number: 28.143

PLATE LVIII



HU

GARMENT HOOKS *TAI-KEU*

Second Half Eastern Chou Dynasty

Garment hooks, which served as clasps for belts or as costume fastenings, gave the Chinese designers remarkable scope for decorative design. This girdle clasp has a hook under the jaw of the animal's head and there is a projecting button under the opposite side to which a belt could have been attached by a loop. A writhing dragon of white jade fills the coil of the animal-headed hydra. The dark bronze is inlaid alternately with gold and silver.

Height: 3¼ *inches* (8.3 *cm.*)

Width: 3¼ *inches* (8.3 *cm.*)

Accession number: 30.703

Of exquisite simplicity this double-headed hydra with its long graceful curve shows the refinement of form and decoration of which the Eastern Chou designers were capable. Inlays of gold and silver in bands and patterns enrich the simple surfaces.

Length: 7½ *inches* (19.4 *cm.*)

Width: ½ *inch* (1.3 *cm.*)

Accession number: 31.2

PLATE LIX



HU

INLAID CHARIOT OR FURNITURE FITTINGS *HENG*

Second Half Eastern Chou Dynasty

The hollow sockets with rivet holes indicate that these handsome fittings, inlaid with silver and gold, served to cap the ends of wooden members. Many such mountings of the period have survived. Sometimes their form explains the function exactly. Our castings may have served either as rests for a horizontal bar, as hooks to which loops or guy-ropes could have been attached, or as ends of standards or furniture parts.

The bronze is generally dark reddish brown in color.

A Pair of Finial Hooks inlaid with silver. *Accession numbers:* 32.972 and 32.973

Length:	7½ *inches* (19.3 *cm.*)
Height:	3¼ *inches* (8.4 *cm.*)
Width:	1⅛ *inches* (3.0 *cm.*)

B Hexagonal Finial inlaid with silver *Accession number:* 45.213

Height:	5⅝ *inches* (14.4 *cm.*)
Diameter at base:	1 7/16 *inches* (3.6 *cm.*)

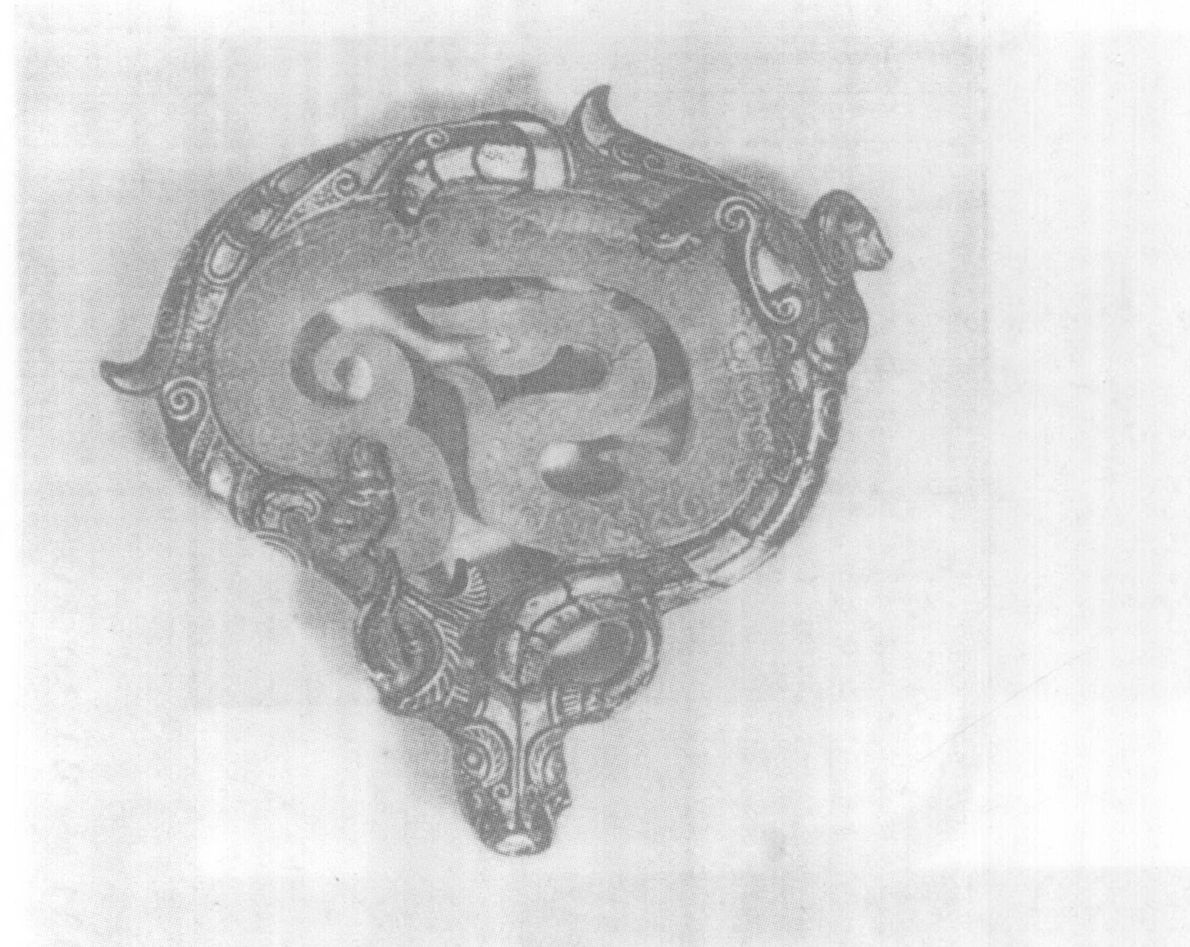
C Finial inlaid with silver and gold *Accession number:* 45.212

Height:	4¾ *inches* (12.1 *cm.*)
Greatest diameter:	1 11/16 *inches* (4.4 *cm.*)

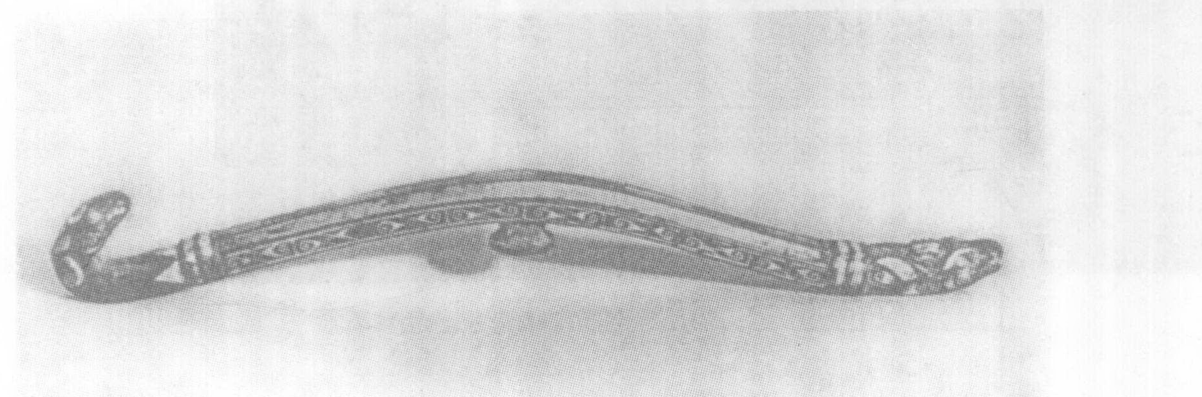
D Pole Cap inlaid with silver *Accession number:* 45.214

Height:	2⅞ *inches* (7.3 *cm.*)
Diameter:	1 5/16 *inches* (3.3 *cm.*)

PLATE LX



GARMENT HOOK *With jade center*



GARMENT HOOK

COVERED WINE VESSEL *HO*

Second Half Eastern Chou Dynasty

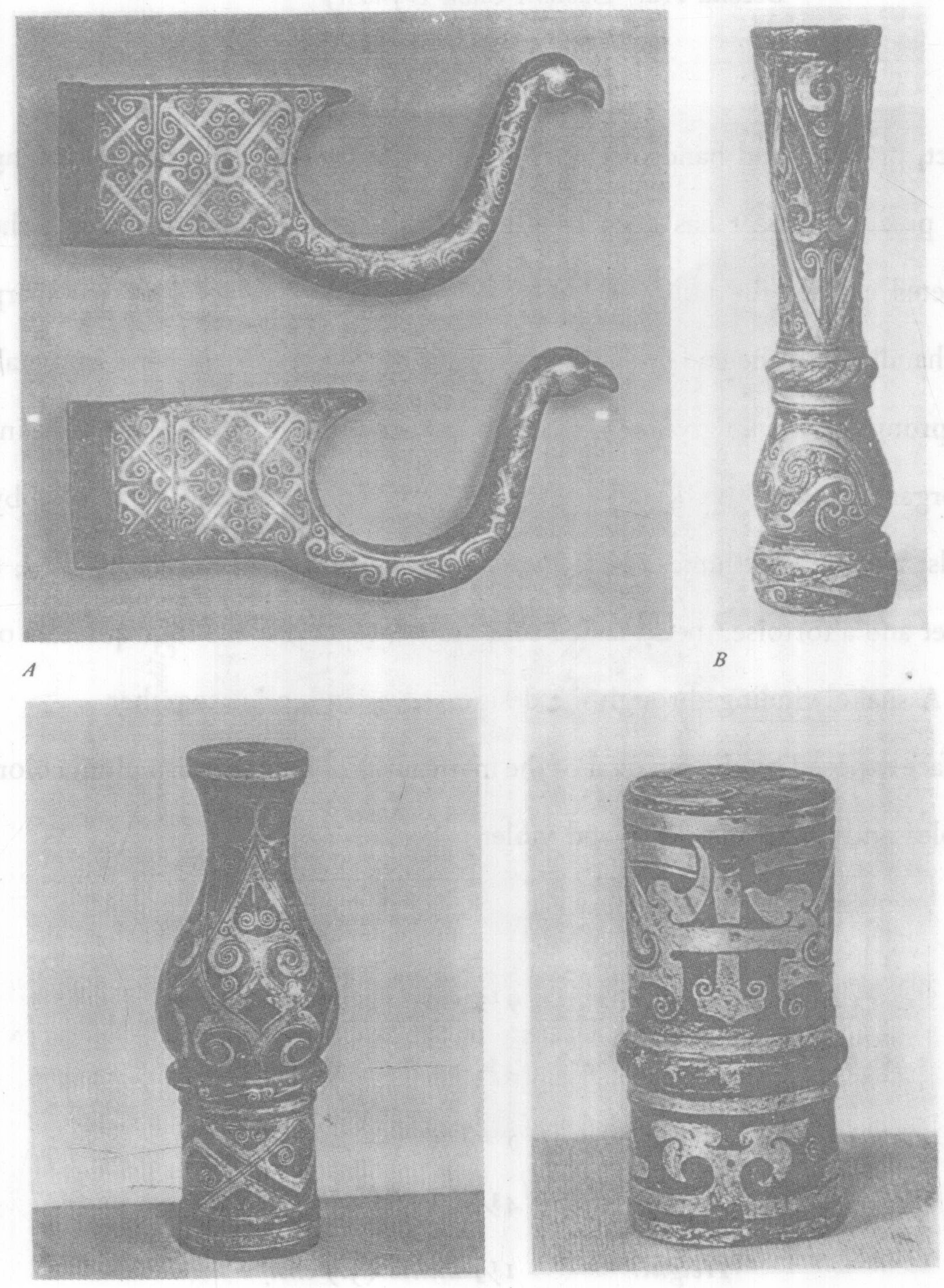
The supporting legs indicate that this vessel was for heating wine. The hinged beak on the spout served to retard evaporation. This *ho* is a fantastic departure from the usually sober bronze forms. Here is assembled a curious array of creatures, men with huge bird headdresses, a feline animal stretched into a handle, a spout in the shape of a bird's head, a fish tail on the opposite side of little esthetic value, and a seated monkey on the lid, to attach the chain to the handle. Among several known *ho* of this type a monkey is frequently found on the lid. Such a heterogeneous assembly must have had definite ritual significance, but it is unknown to us. The surface of the body is divided by horizontal bands inlaid with copper, and the neck supporting the lid is decorated in the same manner. The other surfaces are covered with intricate all-over patterns in sharp but low relief, in which birds' claws may be distinguished.

The surface is light yellowish green, occasionally deepening to brown. The inlays are a decided reddish brown, and there is considerable incrustation of crystallized malachite.

Height:	10⅛ *inches* (25.4 *cm.*)
Diameter:	8¼ *inches* (21.0 *cm.*)

Accession number: 30.366

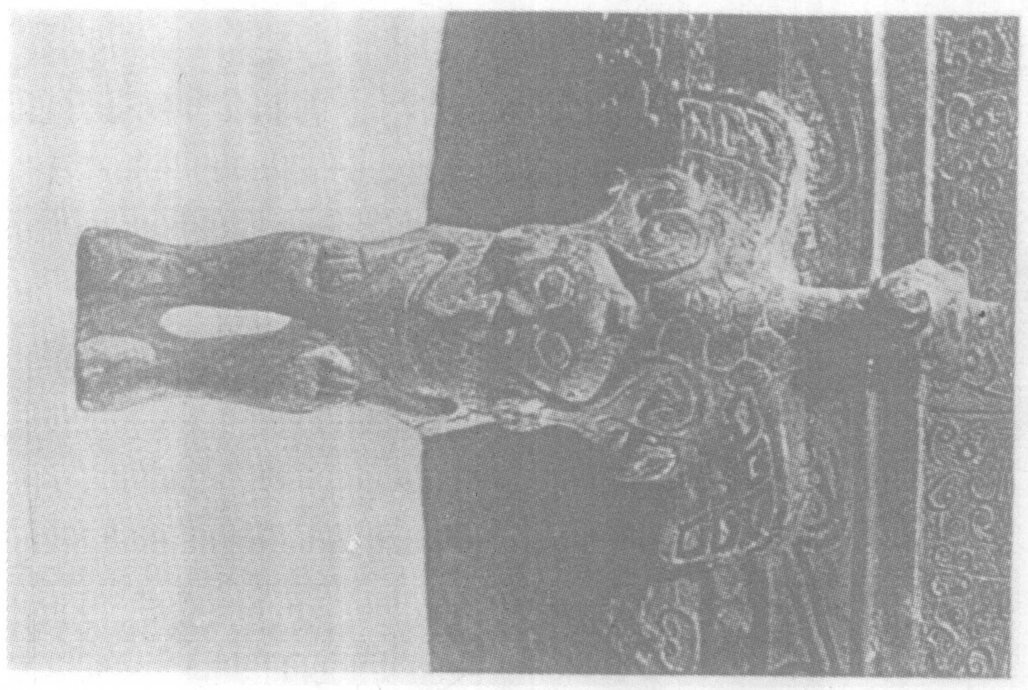
PLATE LXI



A *B* *C* *D*

INLAID FITTINGS

PLATE LXIII





HO *Supporting figure, front and side*

PLATE LXII



HO

PAIR OF BRAZIERS WITH CUPS *LU with PEI*

Second Half Eastern Chou Dynasty

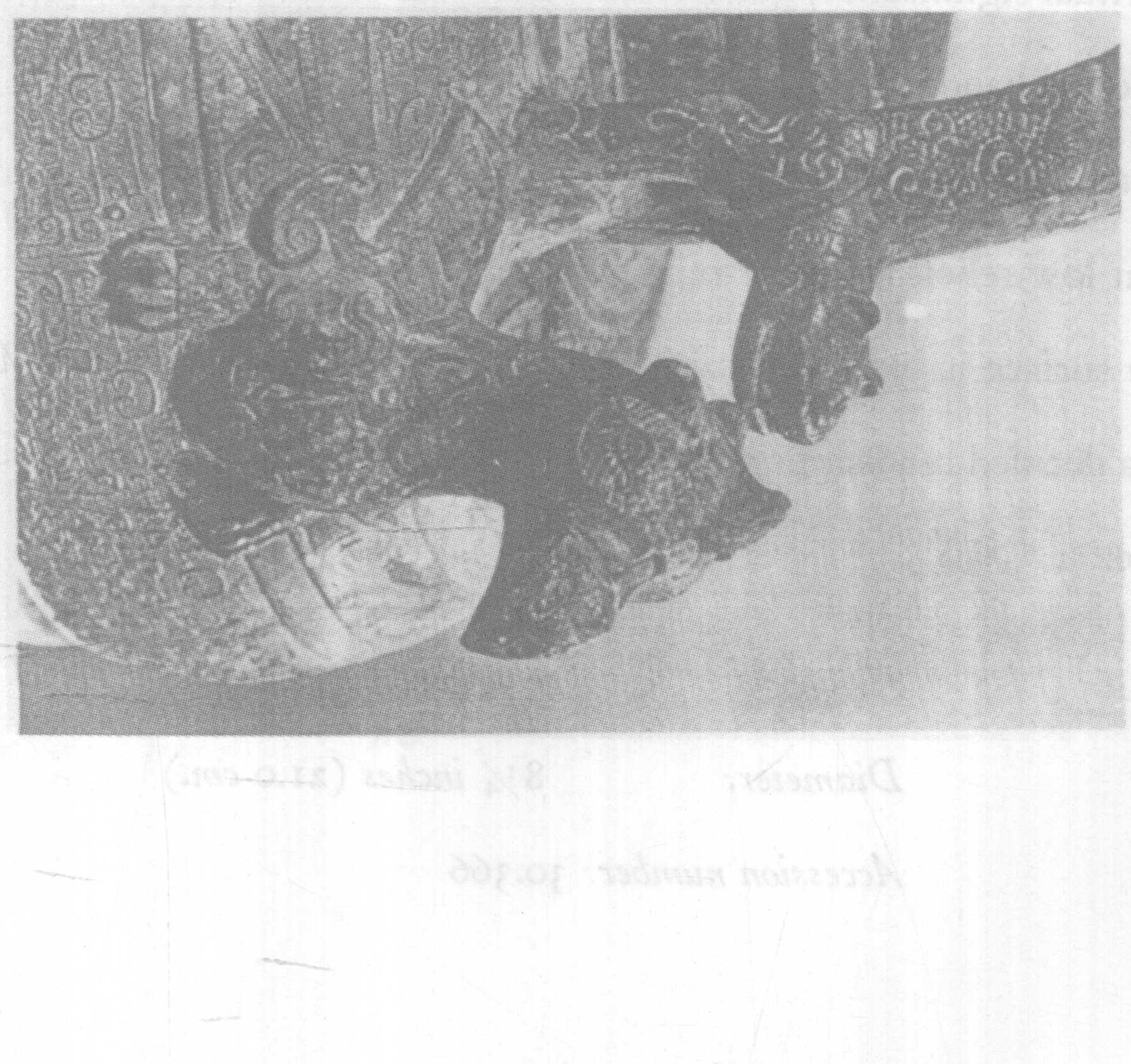
Very compact, practical and handsome is this pair of braziers with cups for heating wine. Every practical aspect has been carefully considered. The pan to which the brazier is riveted catches the hot ashes falling from the grate above. The two sharp bends in the handle keep the end cool, for heat will not follow a sharp bend in metal. The vertical prongs on the lip give steady support to a rounded surface. Handsome indeed is the organization of the design with the corner mouldings above the chubby bear caryatids, and the rhythmic interlacing of the animal forms above. A bird, a dragon, a tiger and a tortoise, the so-called four spirits, represent the four quarters of the heavens. A snake winding through the design serves to bind it together.

The surface exposed by the removal of the incrustations is a brownish plum color, contrasting pleasantly with the green and violet patination.

Brazier:	*Total length:*	9½ *inches* (24.0 *cm.*)
	Height:	4¾ *inches* (12.0 *cm.*)
Cup:	*Length:*	5 *inches* (12.3 *cm.*)
	Width:	4³⁄₁₆ *inches* (10.2 *cm.*)
	Height:	1½ *inches* (3.9 *cm.*)
Accession numbers:		30.362 and 30.363

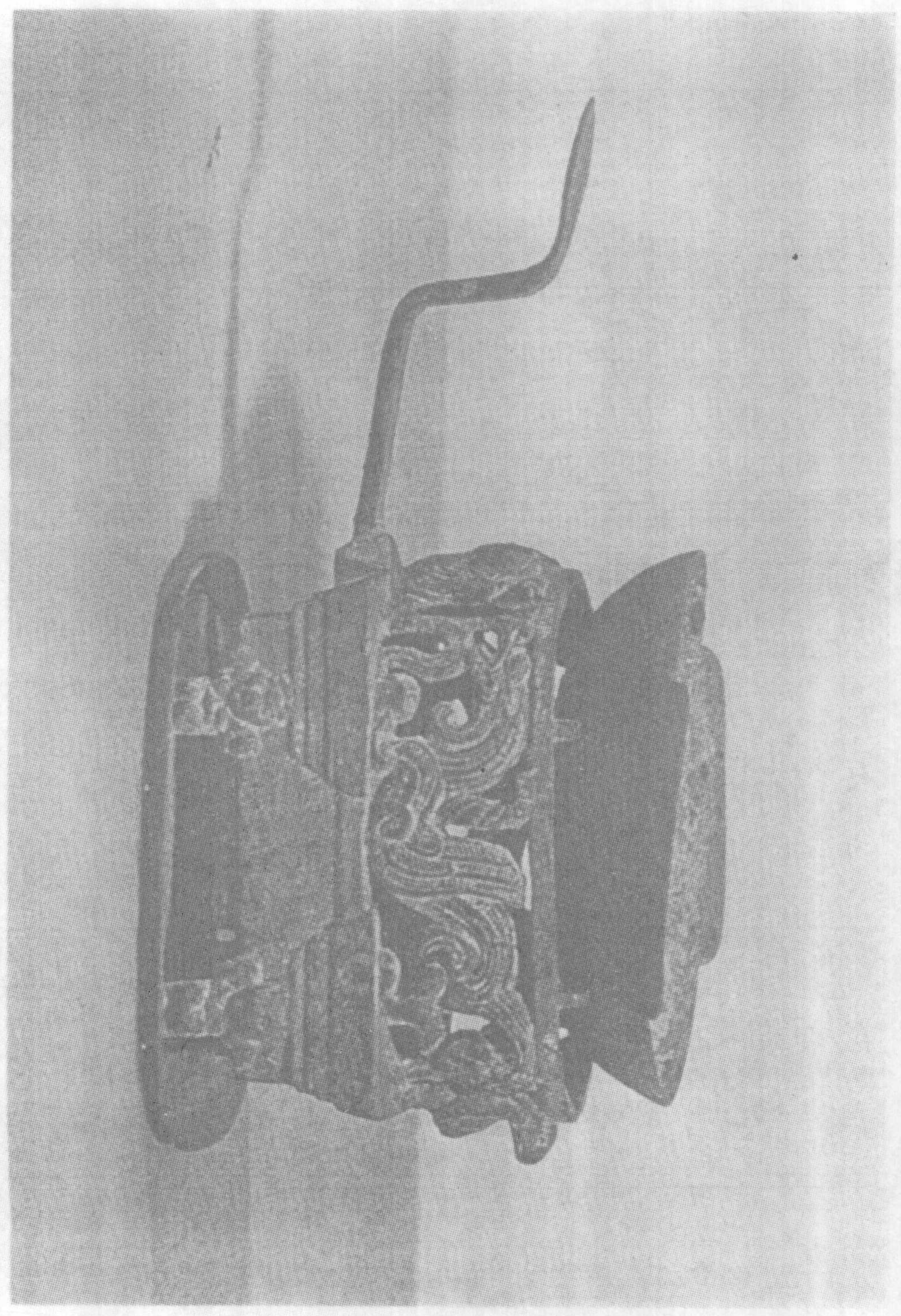
PLATE LXIV





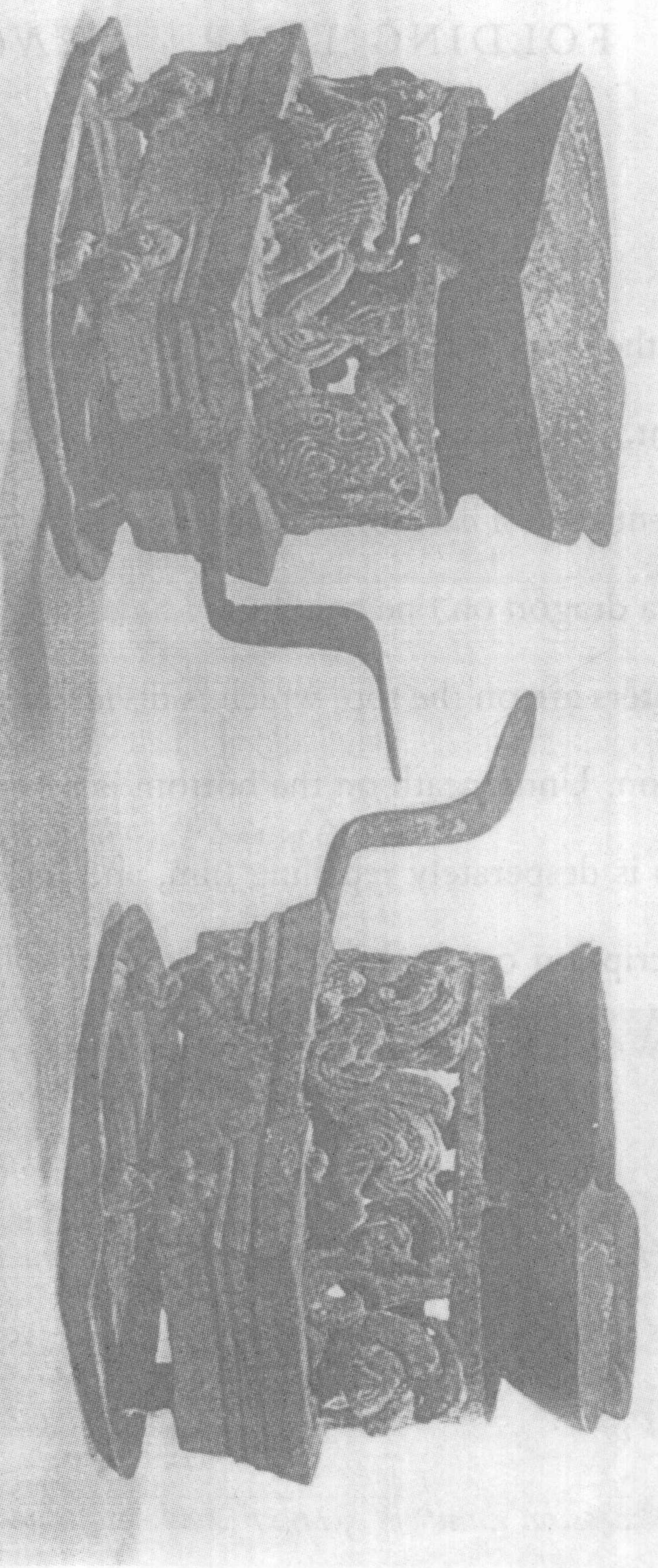
HO *Details*

PLATE LXVI



LU with PEI — Side view

PLATE LXV



PAIR OF LU with PEI

MIRROR *CHING*

Late Eastern Chou Dynasty

This mirror is a good example of the intricate cast pattern of Late Eastern Chou, superbly adjusted into areas bounded by simple slightly concave bands. Though perfectly characteristic of its period it does not fall into any of the better known design categories, evidently being made for purely esthetic reasons, without any ritualistic significance.

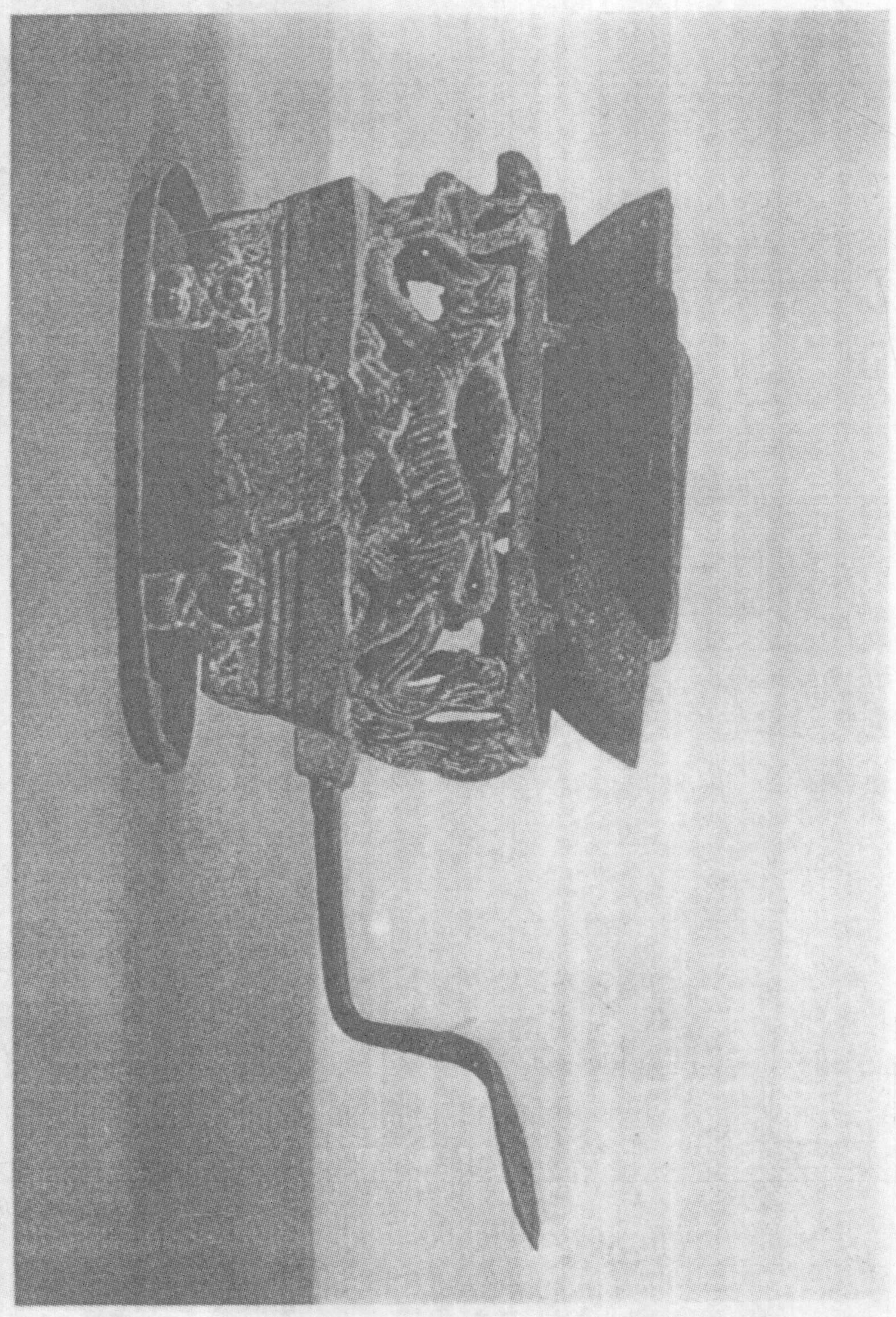
Diameter: 6⅝ *inches* (16.8 *cm.*)

Thickness at edge: ¼ *inch* (0.6 *cm.*)

Thickness at boss: 7/16 *inch* (1.2 *cm.*)

Accession number: 37.124

PLATE LXVII



LU with PEI Opposite side view

FOLDING LAMP *TENG*

Han Dynasty

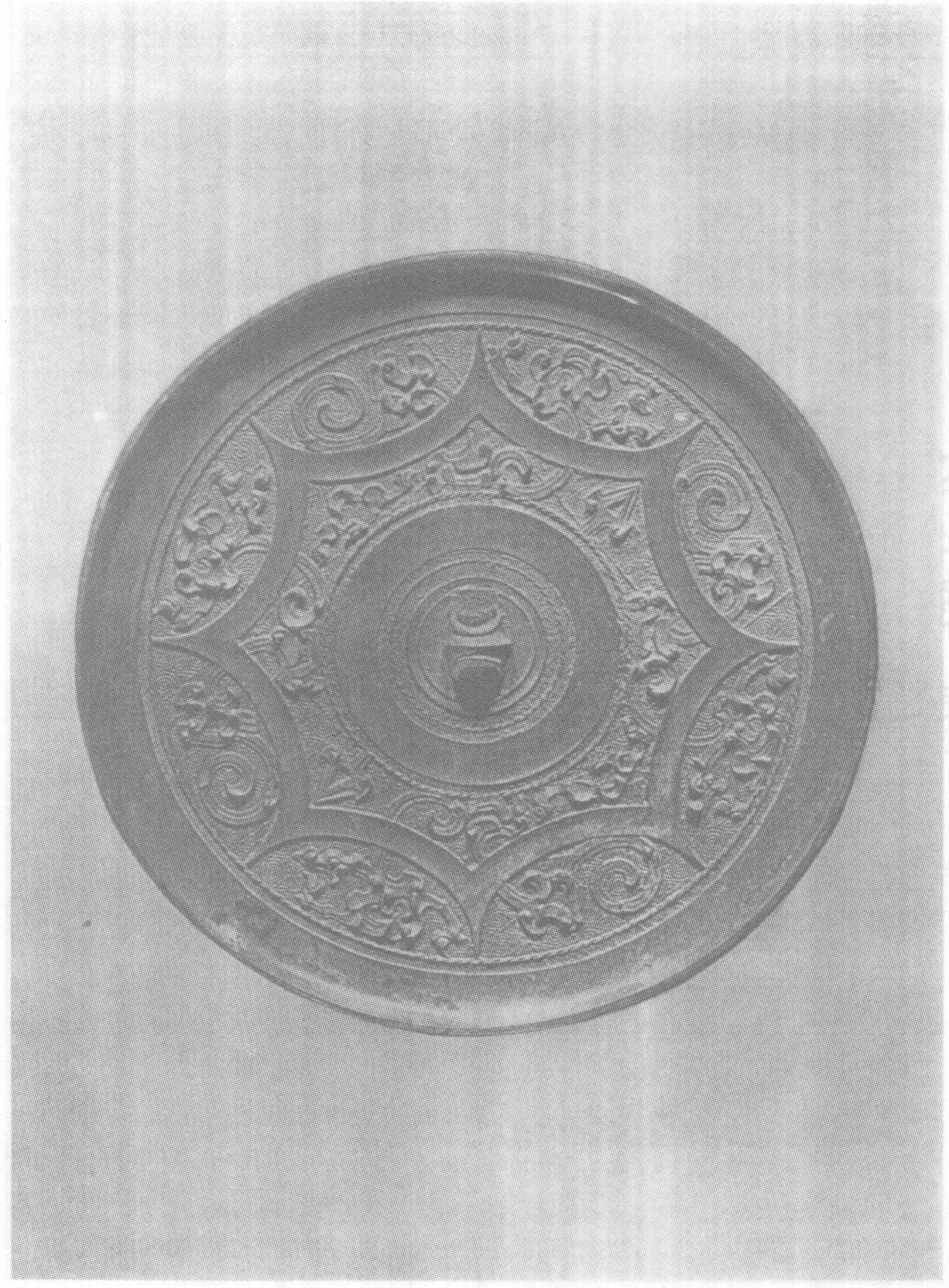
This folding lamp in the shape of a covered double-eared cup is a very practical solution of a portable light. Indeed, it probably served in the same capacity as our pocket flashlight of the present day. The short spout on the lid would support a wick. The incised design shows a dragon on one handle and a dashing tiger on the other. Dragons and winged monsters are on the top, which is divided into four quarters by bands of geometric decoration. Underneath on the bottom is a very spirited scene of a tiger attacking a bear, who is desperately repelling him, and inside the lid two fish are incised. An incised inscription on the band of the movable lid reads:

"Well (for) son (and) grandson. Luck."

Height:	2½ *inches* (6.5 *cm.*)
Length:	5⅛ *inches* (13.0 *cm.*)
Width:	4⅜ *inches* (11.2 *cm.*)

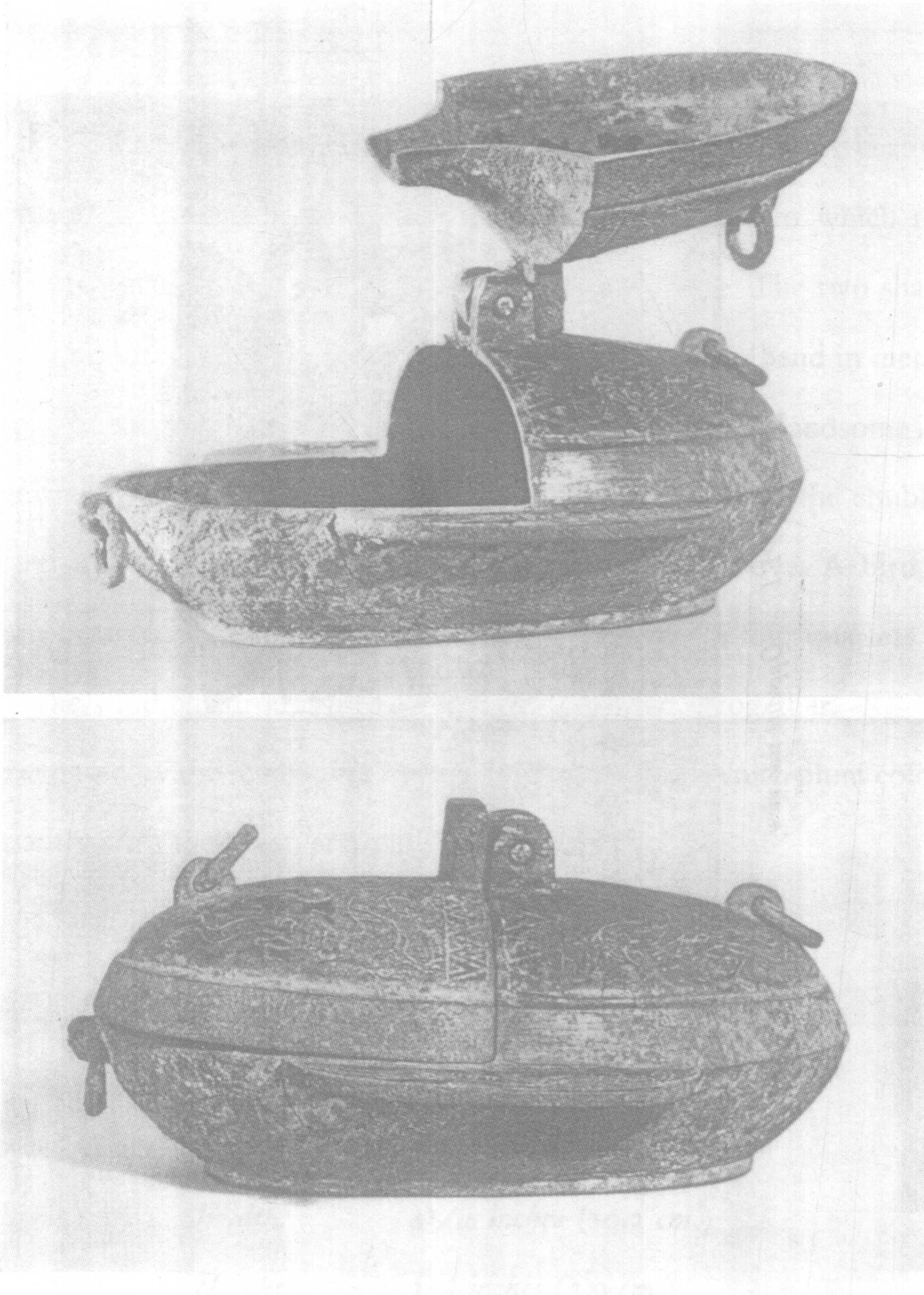
Accession number: 30.907

PLATE LXVIII



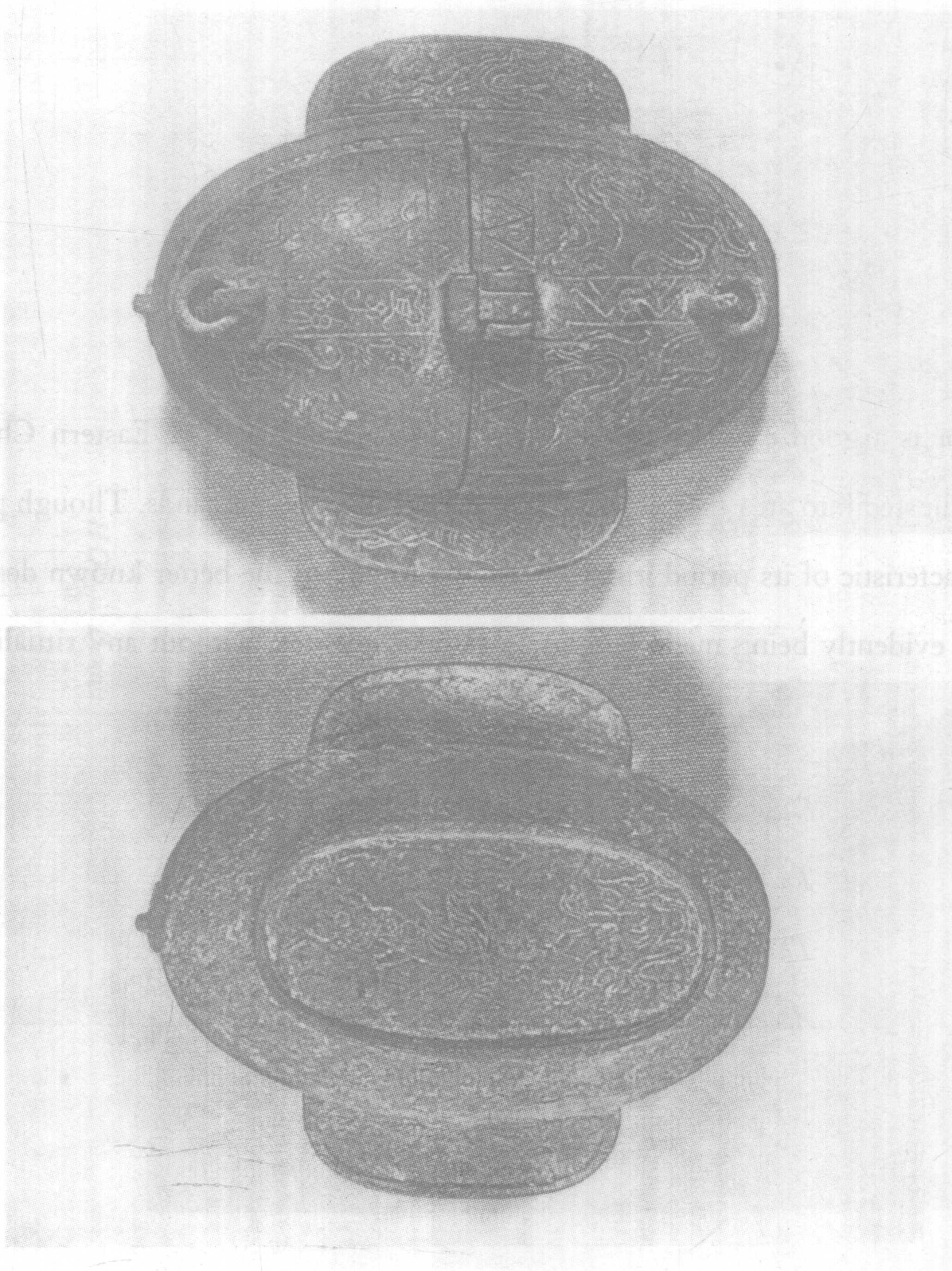
CHING

PLATE LXX



TENG *Lid raised and closed*

PLATE LXIX



TENG *Top and bottom*

JAR FOR STORING WINE *HU* (*Chung*)

Han Dynasty

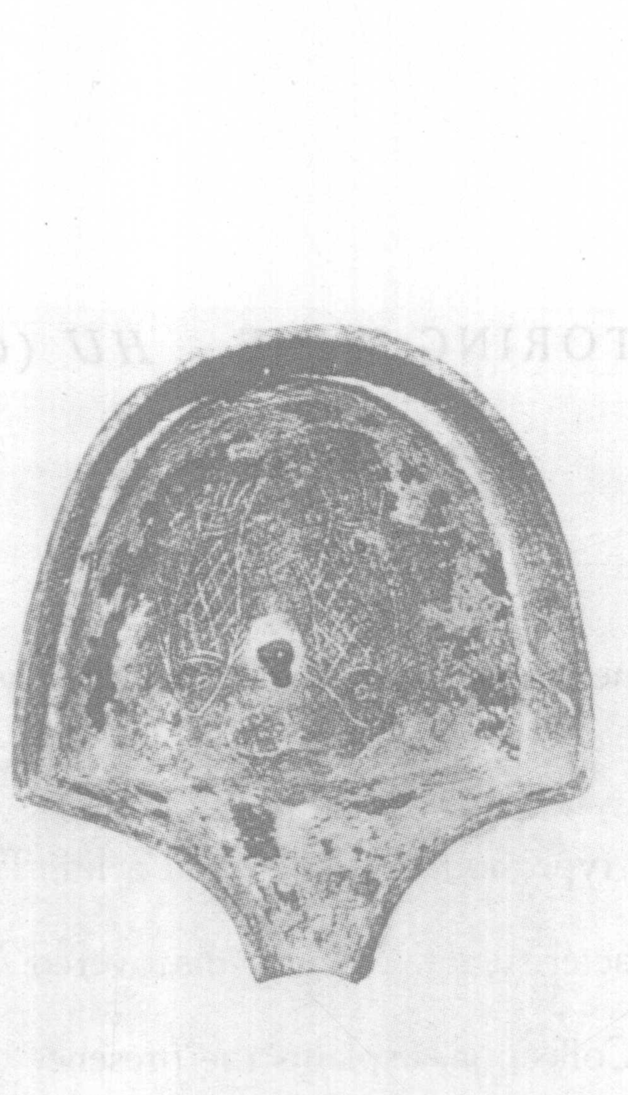
This magnificent gilt bronze *hu* (*chung*) is one of the finest examples known. The shape is of the standard type favored in its period, and it probably had a lid. Its unusual qualities are found in the decorative designs covering its surface, and the crisply modeled masks which hold the rings. Although there is no inscription, the predominance of the dragon motif in the decorative scrolls makes it probable that this may have been an imperial piece. Decoration in this technique is patterned after the inlaid decorations in gold and silver such as may be seen on the small *hu* (pl. LVIII) and the belt hooks (pl. LX) in the Buckingham Collection. Eminently practical people, the Chinese craftsmen devised a method of getting a similar but quicker effect. The outlines were engraved in the surface and the parts which were to appear as silver were painted with mercury. This mercury combined with the gold of the plated surfaces to produce a silver-colored amalgam, which wears very well. Although some of this silver color has rubbed away from our piece, sufficient remains to give a vivid idea of the original splendor of the decoration.

Height: 17¾ *inches* (45.0 *cm.*)

Diameter: 14³⁄16 *inches* (36.0 *cm.*)

Accession number: 27.315

PLATE LXXI



TENG *Inside of lid*



TENG *Detail of bottom decoration*

PLATE LXXIII



HU *Handle*

PLATE LXXII



HU

JAR FOR STORING WINE *HU (Chung)*

Han Dynasty

Large *hu* for storing wine, sometimes of several gallons capacity, were made in great abundance during Han times and according to Chinese records were then called *chung*. This form is a favorite type, and originally had a lid. The decorative bands and the ring handles are characteristic. A recently discovered *hu* of this shape, formerly in the Eumorfopoulos Collection, explains the presence of the bands. The *hu* was made of wood with vertical staves like a barrel, and the hoops which held the staves in place were metal bands. The original wood form thus determined the bronze shape which succeeded it.

The surface of our *chung*, once heavily gilded, is considerably worn, exposing a grayish green patina. On the lip incised characters read: "East Palace, Seven."

Height: 16¾ *inches* (42.5 *cm.*)

Diameter: 13¹⁵⁄₁₆ *inches* (34.9 *cm.*)

Accession number: 24.241

PLATE LXXIV





HU Details of surface ornament

GILT BRONZE TOILET BOX *LIEN*

Han Dynasty

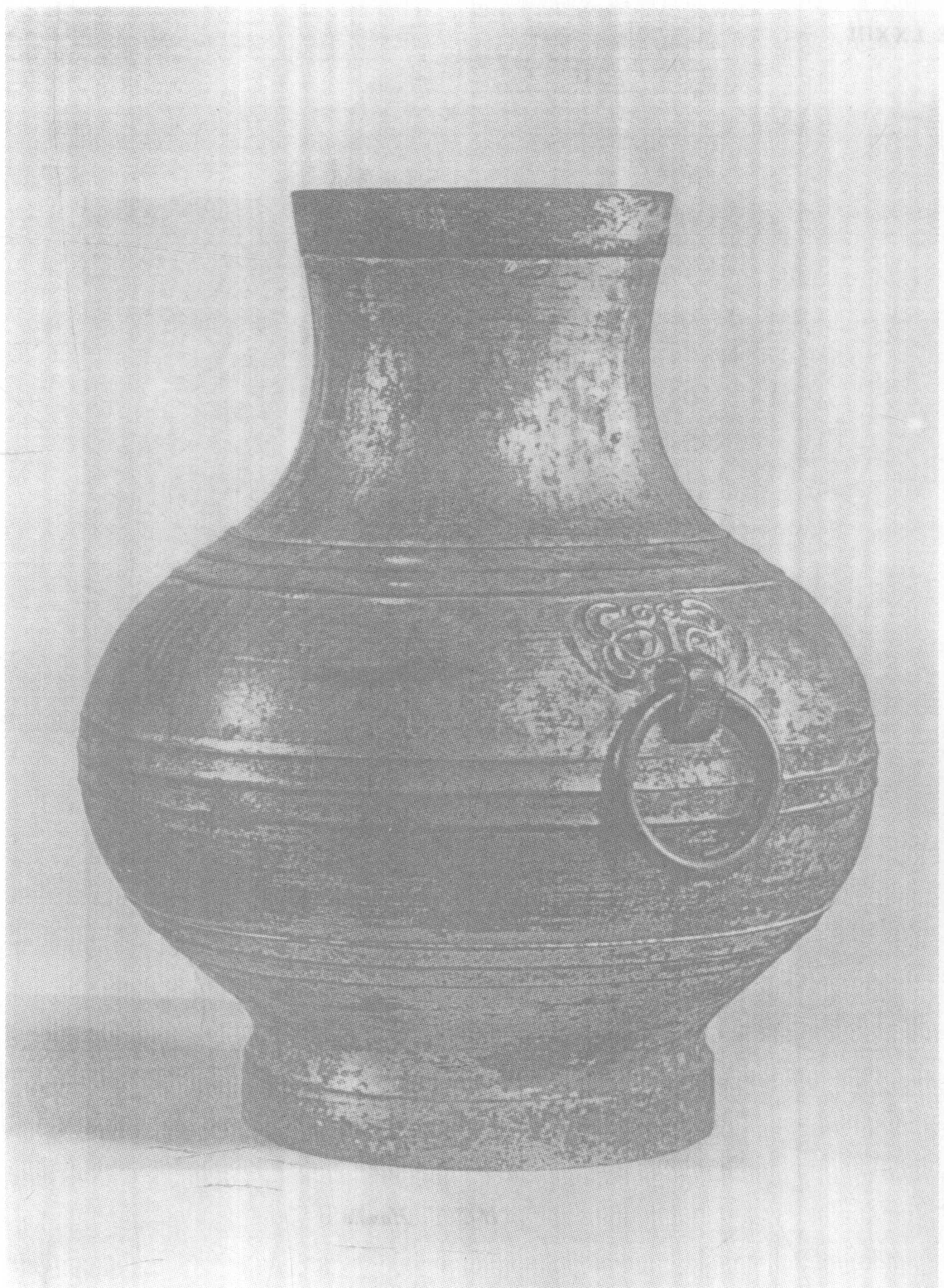
The little bears which act as supports for this cylindrical toilet box are characteristic of the Han Dynasty, but the perky little birds on the lid have survived from an earlier date. The ring handles in tiger masks are also characteristically Han. Without decoration except for the simple band on the base and around the lid, the box is very attractive in proportion. Its heavily gilt surface is incrusted with green deposits.

Total height: 4¼ *inches* (10.9 *cm.*)

Diameter: 3¾ *inches* (9.5 *cm.*)

Accession number: 28.145

PLATE LXXV



HU

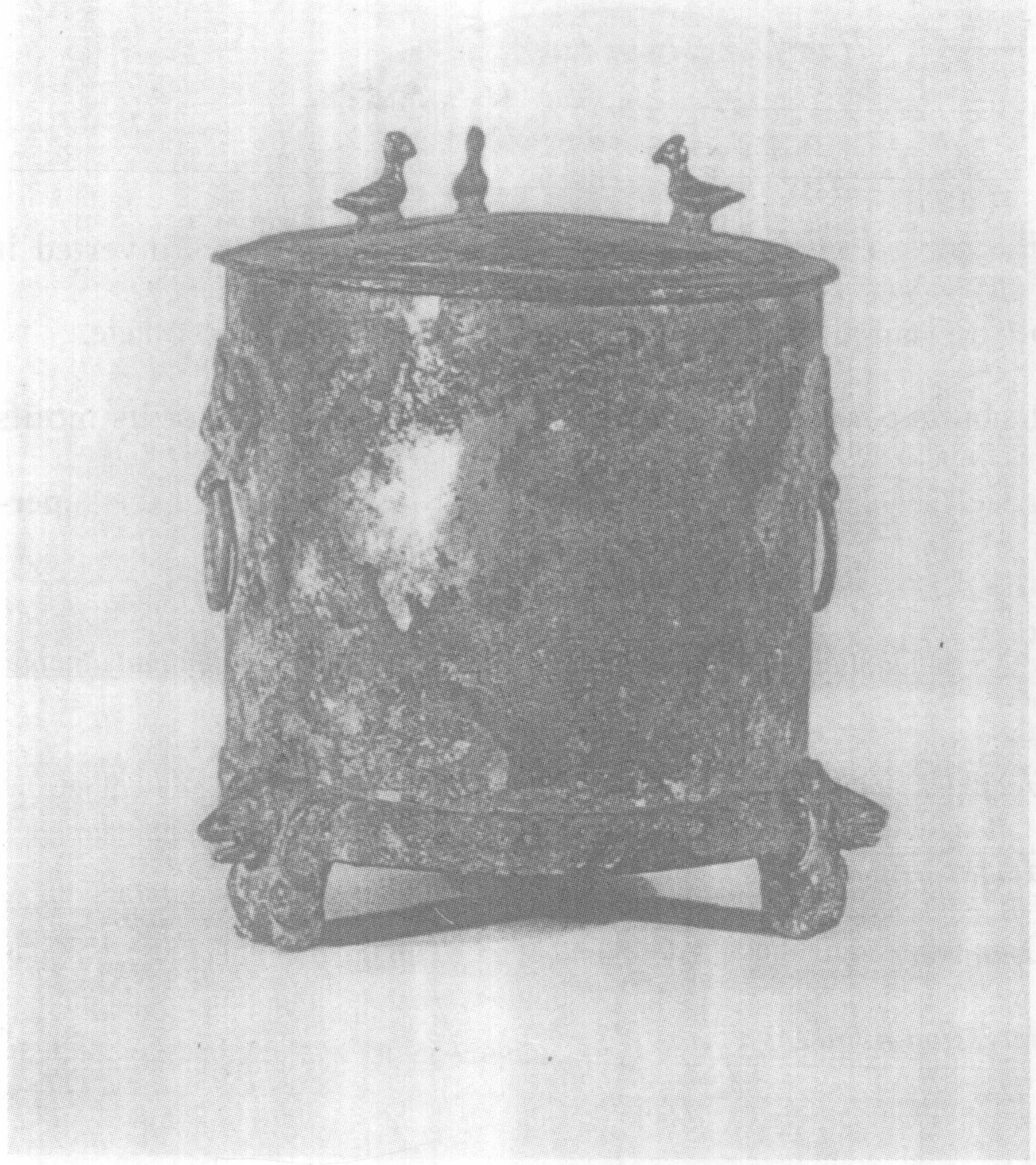
GILT BRONZE WINE VESSEL *HU* (*Chung*)

Probably Han Dynasty

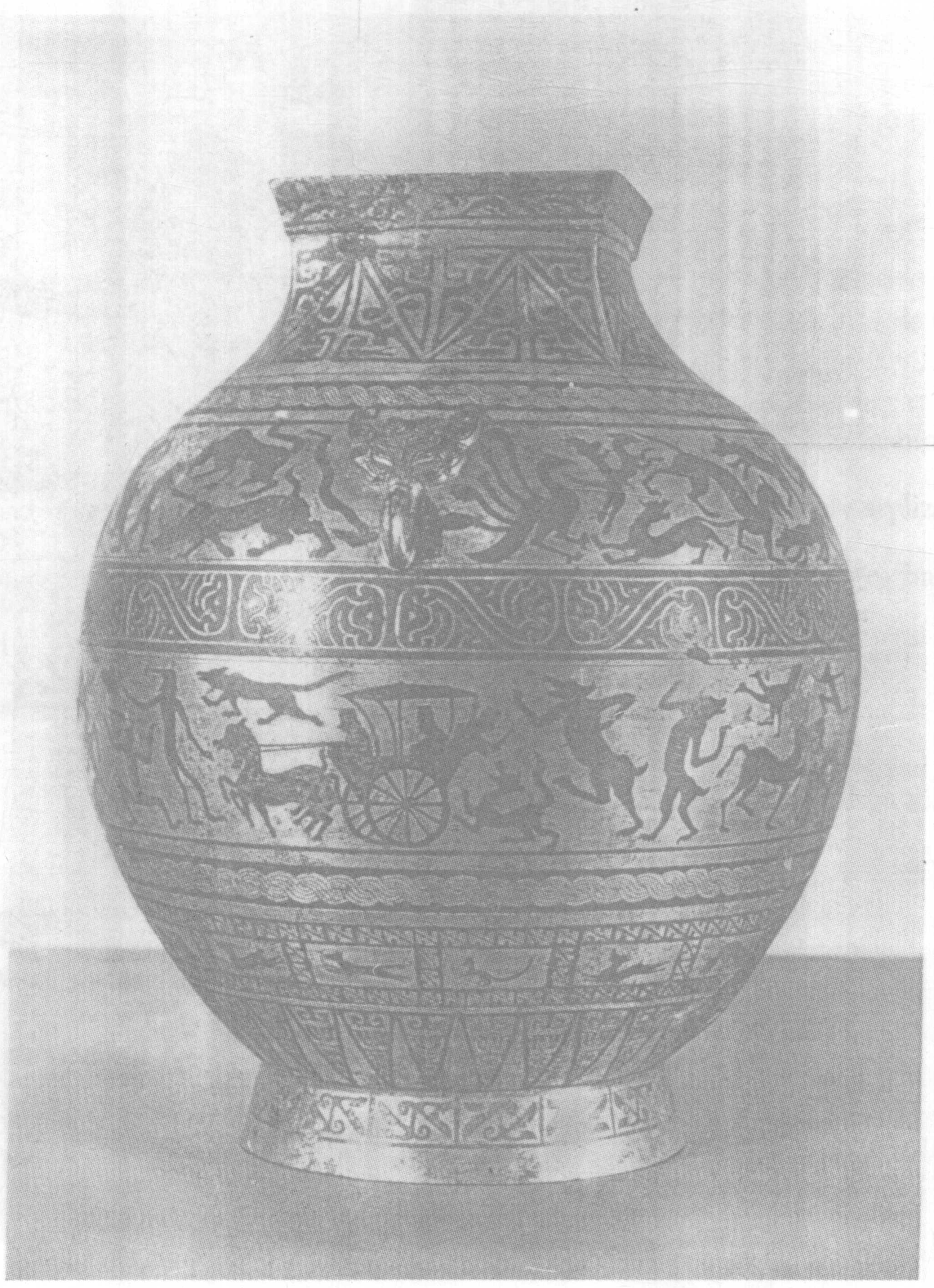
This *hu* is almost identical with one at the Boston Museum of Fine Arts. It is unusual in having a square mouth which has been integrated with the ovoid form of the body by carefully modeled surfaces and nicely adjusted decorative motifs. The processions of fabulous birds, beasts, and half-human monsters that parade about the two bands of decoration tie it in with the supernatural beings that are so frequently present in the stamped tiles of the Han Dynasty.

The decorative effect of silver inlaid on gold is produced by incised outlines, and painting the gold ground with mercury wherever the appearance of silver is desired. Another *hu* (pl. LXXII) in this collection is of the same technique.

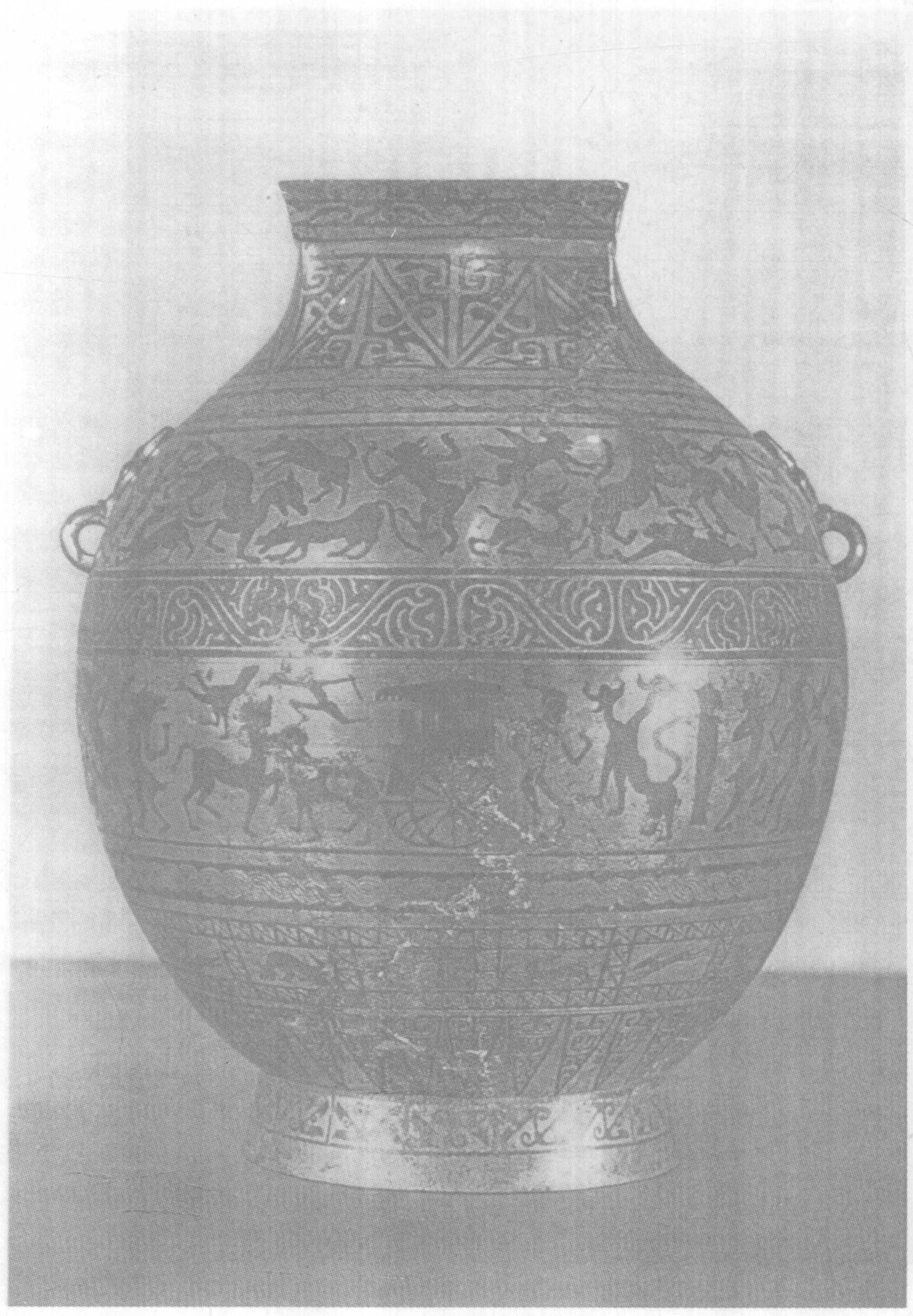
Height:	13 1/16 *inches* (32.4 *cm.*)
Diameter:	10 7/8 *inches* (26.4 *cm.*)
Accession number:	31.10



LIEN



HU *Side view*



HU *Front view*

COVERED GILT BRONZE BOWL *KUEI*

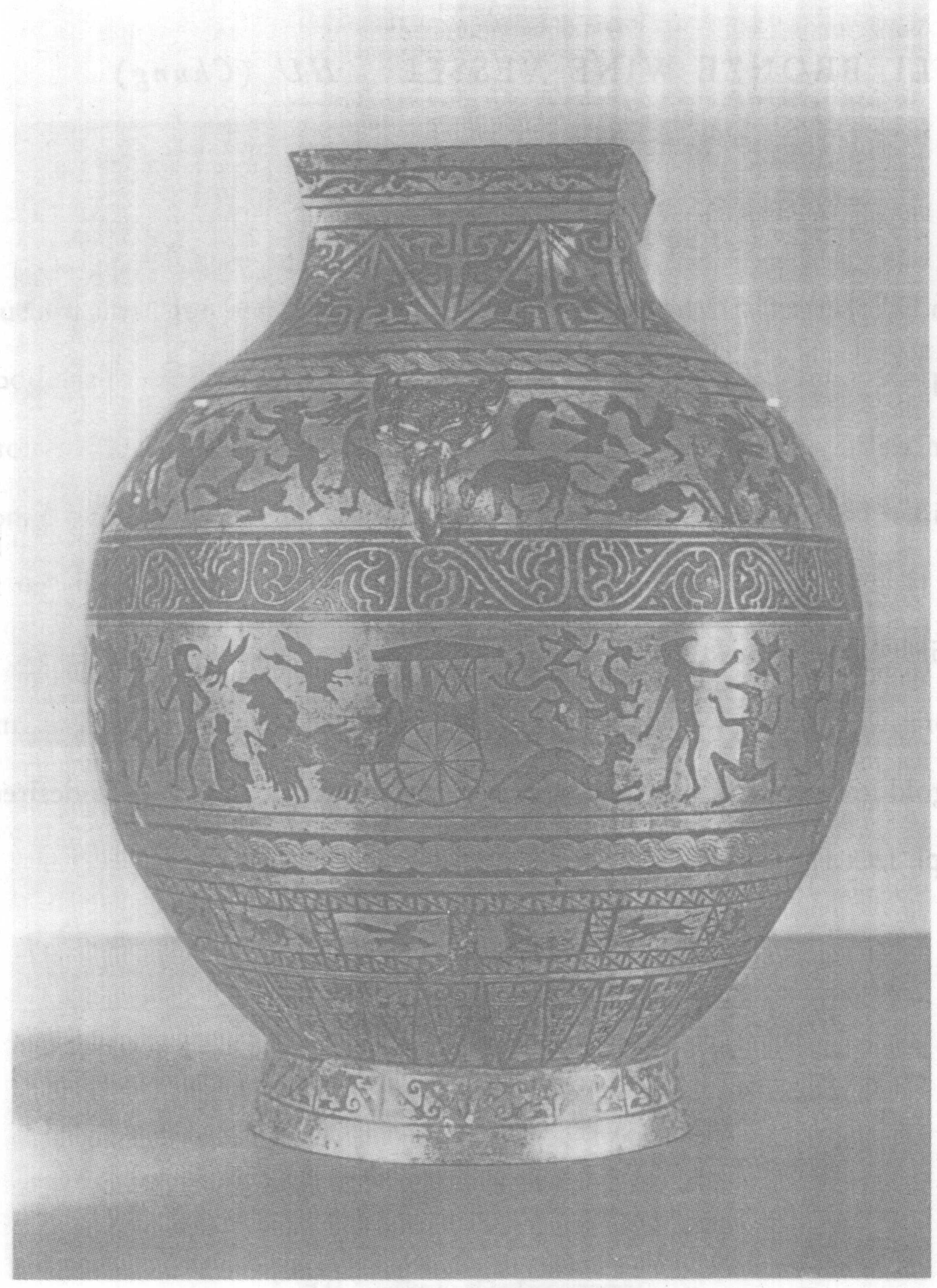
Han Dynasty or later

This bowl falls into the category of double dishes, for when the lid is inverted it stands on the heads of the four drooping birds and forms a footed receptacle.

It is of the same technique as our square-mouthed *chung* and many of its motifs are the same, so it may well have belonged to the same set. The drawing of the supernatural creatures and the decoration of the lid are very handsome.

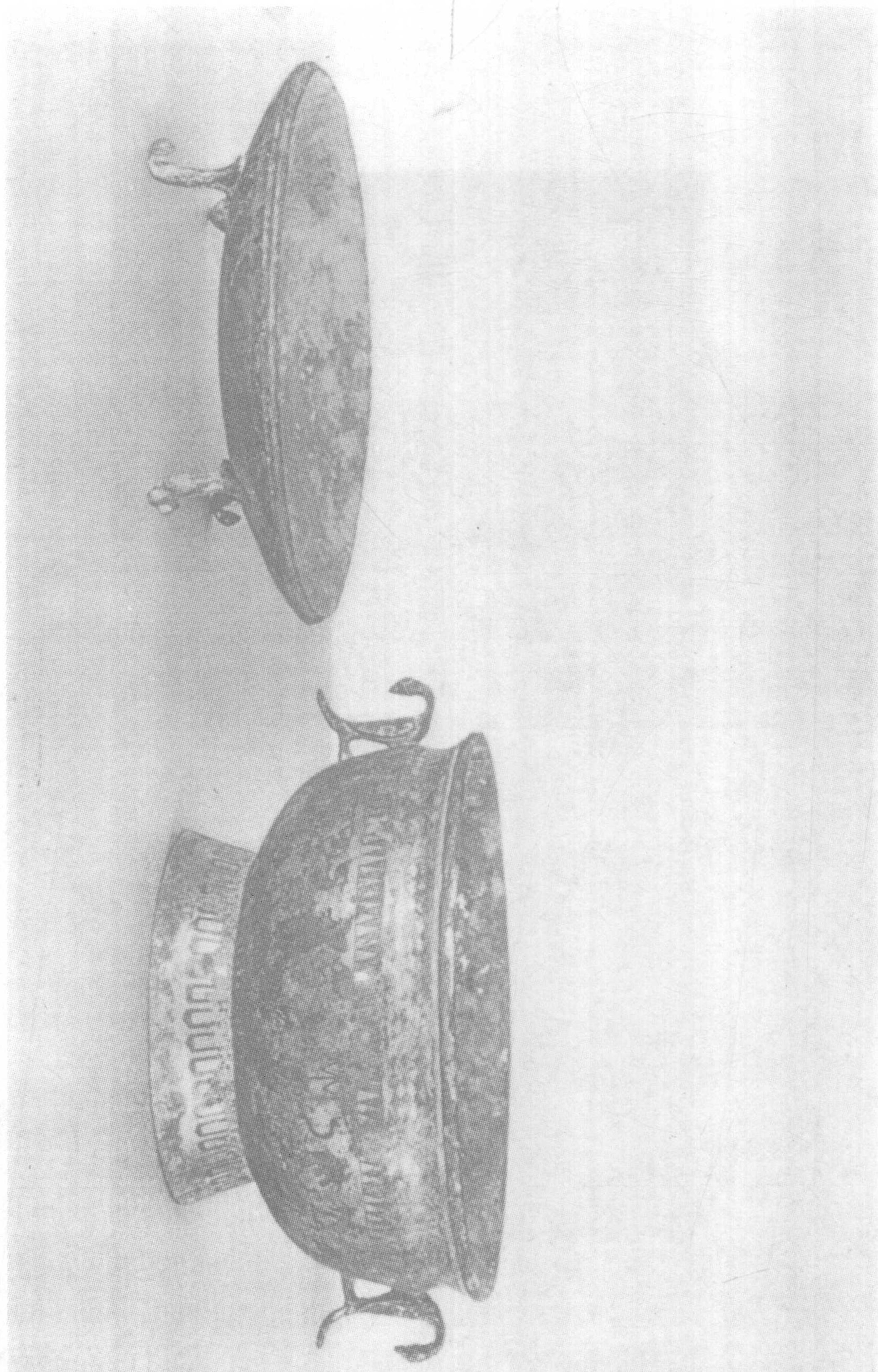
Height with lid: 7 7/16 *inches* (18.7 *cm.*)
Height without lid: 5 *inches* (12.7 *cm.*)
Diameter: 9 5/16 *inches* (23.7 *cm.*)
Accession number: 31.12

PLATE LXXIX



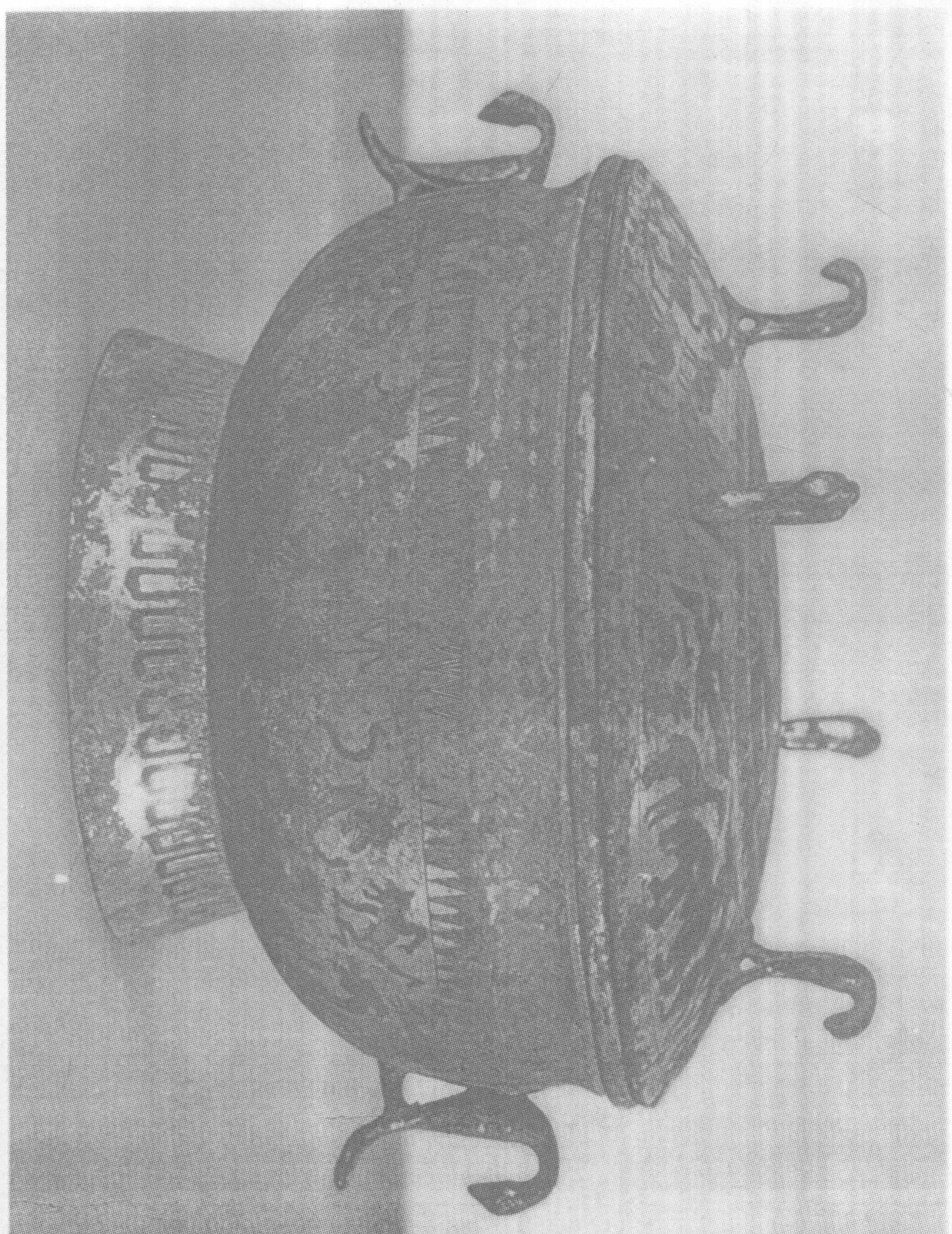
HU *Opposite side view*

PLATE LXXXI



KUEI *Lid removed*

PLATE LXXX



KUEI

PILGRIM BOTTLE *PIEN HU*

Han Dynasty or later

Different from any *hu* known to the compilers of this volume is this handsome, subtly formed pilgrim bottle, its surface decorated with beautifully incised motifs, but without relief of any kind. The general color of the piece is so beautiful that the delicate enriching patterns can easily be overlooked unless they are attentively studied. Peacocks, running deer and latticed decorations are favorite motifs for the stamped funerary tiles abounding in Han times. Their use here would seem to give a general indication of the date of the *hu.*

The patina is of the type often called "water patina," very soft and smooth,—a light gray-green with small patches of azurite and malachite.

Height: 8⅞ *inches* (22.5 *cm.*)

Width: 10½ *inches* (25.6 *cm.*)

Accession number: 37.122

PLATE LXXXII



KUEI Lid

MIRROR *CHING*

Late Han Dynasty

The back of this mirror presents mythological history in truly monumental fashion. On opposite sides two important personages sit in state surrounded by highly stylized horses and chariots and robed figures, which may be dancers. The personages have been called Hsi Wang Mu and Tung Wang Kung.

Diameter: 8⅛ *inches* (20.5 *cm.*)

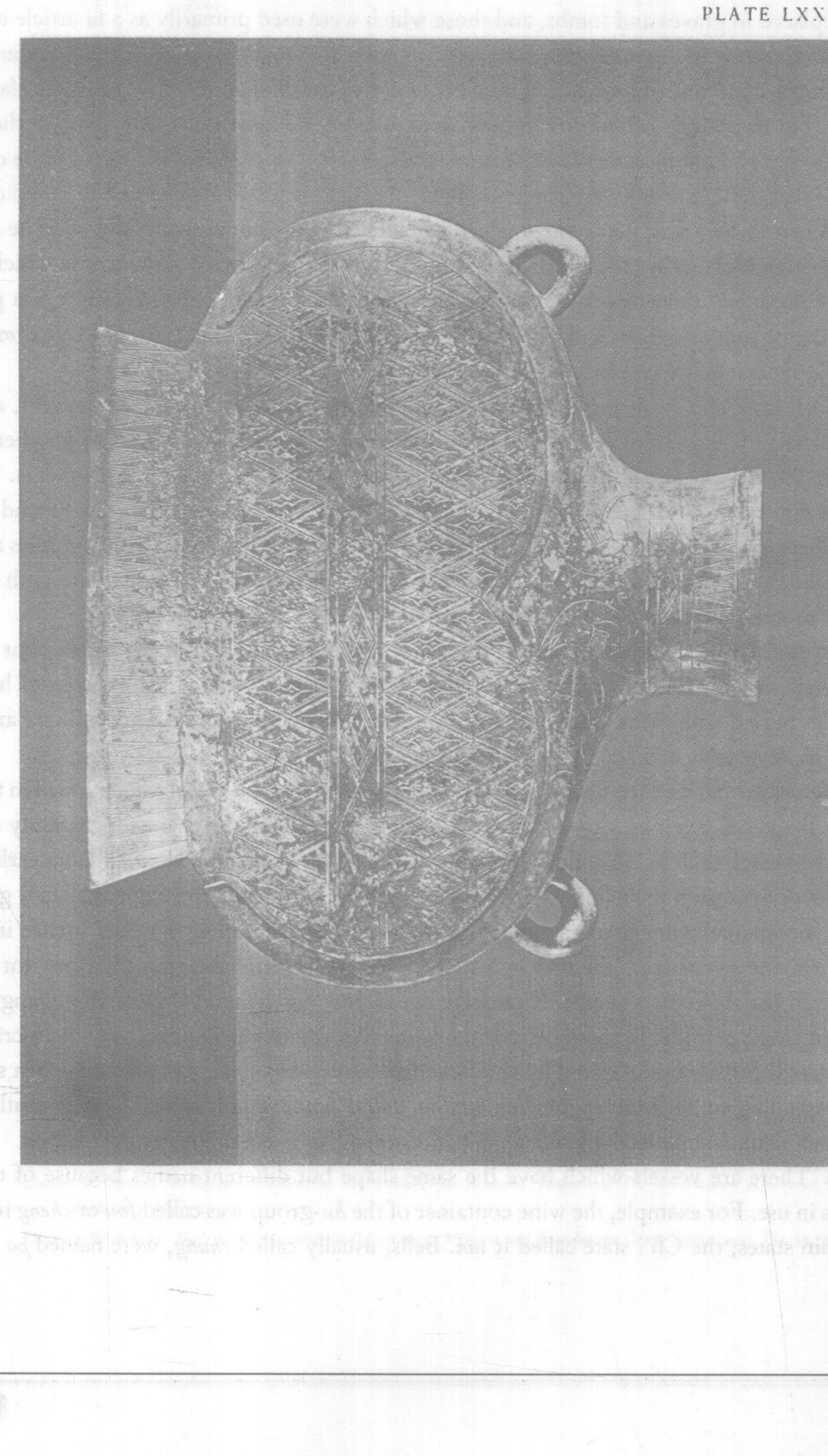
Thickness at edge: ¼ *inch* (0.6 *cm.*)

Thickness at boss: ¾ *inch* (2.0 *cm.*)

Accession number: 29.644

PLATE LXXXIII

PIEN HU



COMMENTARY

The dating of Chinese bronzes is by no means an exact science, but recent excavations and research enable closer approximations than were possible two decades ago. The date of a bronze is estimated by comparison with others of similar shape and design, and with related inscriptions; it is helpful, too, when the archaeological provenance is known. The history of a particular vessel can sometimes be gleaned from the inscription. Though certain classifications are known to have existed only in a certain period, relatively few can be dated with absolute assurance.

Since the chronological systems for ancient China generally used in western countries are, as a whole, faulty, we should here state the most recent conclusions and the system whereby we shall date our bronzes.

Before the unification of China under Ch'in Shih Huang-Ti in 221 B.C., the historical periods can be divided as follows:

1. *Shang*—before P'an Keng (1300 B.C.).
2. *Shang*—from P'an Keng's removal of his capital to Yin until the end of the Shang Dynasty (1300–1027 B.C.).
3. *Western Chou*—from Wu Wang's conquest to the death of Yu Wang (1027–771 B.C.).
4. *Eastern Chou*—from P'ing Wang's removal of his capital to Lo-yang to the unification of China (770–222 B.C.). This period is subdivided into two parts:
   (a) from P'ing Wang's removal to the last year recorded in the Spring and Autumn Annals, 770–481 B.C. This period is called the Ch'un Ch'iu, from the Chinese name for the Annals.
   (b) from the year after the close of the Spring and Autumn Annals to the year before the unification under Ch'in, 480–222 B.C. This period is called the Chan Kuo, or the Warring States Era.

Although the first year recorded in the Spring and Autumn Annals was 722 B.C., it is proper to include the beginning of Eastern Chou within this time, that is from 770 to 222 B.C. The nominal control held in the royal Chou house ended in 256 B.C., but following this actual dropping of the Chou, the era of the Warring States continued until the time of the actual unification. The span of years for the Eastern Chou was 515 (770–256 B.C.) and almost all of the records are in fairly close agreement for this period, not only with regard to its total length but also the number of years allotted for each king's reign. A difficult problem arises when the chronology of the Western Chou is considered, for here there is no table available from the *Shih Chi* (Historical Record) either for the length of the individual reigns before the Kung Ho period, or for the entire period. Han scholars had constructed an ideal chronology for their theory of Western Chou's duration, and Sung scholars invented reign periods for each king, this entire scheme eventually becoming the traditional chronology.

PLATE LXXXIV



CHING

Nevertheless, in piecemeal fashion, the chronology of Western Chou can now be reconstructed. It is necessary to move backwards from the year 771 B.C. The validity of the *Chu Shu Chi Nien* (Bamboo Annals) has been tested in a variety of ways and they have been found trustworthy even in details. These Annals were compiled in 297-96 B.C., and because they are in agreement with the bronzes of Eastern Chou, materials of a much earlier date, they are to be preferred to the Historical Record as the source for reconstructing Western Chou chronology. Also, the approximate dates given in early independent works for various periods are substantiated by the dates recorded in the Bamboo Annals. We know that the first year of Kung Ho's period was 841 B.C., and since he held power for fourteen years, the first year of Hsüan Wang must be 827 B.C. Prior to Hsüan, from Ch'eng Wang to Li Wang, there were eight generations. Assuming four generations to a century, this dates the beginning of the Chou Dynasty circa 1027 B.C. Now according to the Bamboo Annals, Western Chou lasted for 257 years, and if we take the first year of P'ing Wang of Eastern Chou as 770 B.C., then the first year of Western Chou is also 1027 B.C. Again, according to the Bamboo Annals, from P'an Keng's establishment of his capital at Yin to the fall of Shang, there intervened 273 years. The year of this removal may therefore be dated in 1300 B.C., that is, 273 plus 1027. We can as yet say very little about the earlier years of the Shang Dynasty, probably not more than two centuries.

The earliest bronzes we have belong to the second part of Shang. From Western Chou we have more bronzes and some written history from which Western Chou can be divided into three periods:

1. *Early Western Chou*—from Wu Wang to the first half of Mu Wang.
2. *Middle Western Chou*—from the second half of Mu Wang to the first half of Yi Wang.
3. *Late Western Chou*—from the second half of Yi Wang to the end of Yu Wang's reign.

Each of these periods was approximately 80 years, but definite dates cannot be given.

The whole period of Eastern Chou was very long, some five centuries and a half. The Ch'un Ch'iu (770–481 B.C.) and the Chan Kuo (480–222 B.C.) are more easily treated, if each is subdivided into the usual early, middle and late periods. Though this is not an actual historical division, in studying the bronzes for many years I have found this method most satisfactory as an aid in dating and placing the vessels.

It is difficult, if not impossible, to establish a completely acceptable classification for Chinese bronzes for the shapes and forms of certain types of vessels changed according to their times, their places of origin, and their uses. Indeed, the uses of certain of the vessels are still not clear, but as a rule all the vessels may be divided into three main groups according to general use:

Ceremonial Objects	*Military Objects*	*Ordinary Objects*
a. Food vessels	a. Weapons	a. In daily use
b. Wine vessels	b. Chariots	b. Agricultural and hand tools
c. Water vessels		c. Measurement standards
d. Supports		
e. Musical instruments		

We have called the first group "ceremonial" rather than "sacrificial" articles, because the class involves not only the latter type vessels, but also the vessels used in marriage ceremonies, and others placed in graves and tombs, and those which were used primarily as a fit article on which to inscribe a record of important events, such as gifts from superiors, victories in war, historical happenings, contracts and the like. These bronzes were decorated. Among the lower classes similar vessels, but of pottery, wood or bamboo, were in everyday use. Only, however, in the royal and noble homes and temples, were actual bronze vessels used in ceremonies. It should be clearly kept in mind that these bronzes were copies in metal of types originally made in pottery and other materials. When a noble died the bronzes which he had used were buried with him, since he might have need for them in another world. Bronzes found in tombs are of two types: those which the noble actually used, and those specially cast for burial purposes. These latter were not of a particularly high quality and usually had less decoration, sometimes none. This type was called *ming-ch'i*, or *kuei-ch'i*, meaning "vessels used by the deceased person."

Both food and wine vessels can be grouped as heaters (or cookers), containers, and smaller vessels used for transferring both liquid and dry materials from one vessel to another. Supports were used for the wine and food vessels and occasionally for the musical instruments. Water vessels are difficult to distinguish from wine vessels and were used both ceremonially and otherwise.

Chariots are classed as military articles though they were used both in ceremonies and in warfare. Military articles may be called "semi-ceremonial" because of ceremonial use with ceremonial articles proper, and because they were occasionally cast in the *ming-ch'i* type.

In earlier times, ordinary articles in everyday use were buried in the tombs, but as bronzes and metals were then rare, only royalty and high officials could afford the expense of having such valuables buried with them. Such articles as are clearly neither ceremonial nor military are therefore classed as "everyday articles."

Names are derived from four sources: first, the name for the vessel is mentioned in the inscription on the vessel, such as, *ting;* second, the name is taken from the character currently used to describe the vessel, such as, *chia;* third, from early catalogues of bronzes derived from earlier classical works which mention the names of the vessels, such as, *yu;* fourth, the name is simply given to the vessels, no source being used as authority, such as, *fang i*, meaning a vessel square in form. Of these four, the names from the first two sources are the most reliable, but there are not many vessels which list their own names. Especially is this true for wine vessels of the Shang and Early Western Chou periods. In these periods the name of a vessel was not given in the inscriptions and the matter is further complicated by the fact that these wine vessels disappeared when such names were beginning to be listed in the inscriptions and did not appear again. Consequently, the true name will probably never be known. In addition to this there are other difficulties:

1. There are vessels which have the same shape but different names because of the various dialects in use. For example, the wine container of the *hu*-group was called *fou* or *cheng* in the Ch'in and Chin states; the Ch'i state called it *tan*. Bells, usually called *chung*, were named *po* in the Ch'i state.

2. There are vessels which have the same shape but different names in different periods. For example, the wine container *hu* was called *chung* during Han times, and if it was square it was called *fang*.

3. There are vessels of the same shape which have different names because they were used for different purposes. For example, the musical instrument called *kou-to* when used at a feast bore that name, but it was called *cheng-ch'eng* when it was used by the military.

4. There are vessels which have the same name but differ slightly in shape because of local conventions. This is to be seen in the food-heater *ting*, which had a new style in the Ch'u state during the Chan Kuo.

5. Vessels retained the same name but with differences in shape because they occurred in different periods, such as the wine heater *ho* which differed in shape between the Shang and the Chan Kuo.

6. Vessels may have the same name though with slight differences in shape because of uses. The water vessel *yi* is sometimes called *ho* because the measurement standard called *ho* had a shape somewhat similar to the *yi*.

NOTES

The inscriptions are shown in modern characters in the margins.

Shang Dynasty

MASK 26.357 Inscription: "YA, TS'E, PU." (See pl. III.)

亞 冊 冊 不 (冊不二字在亞字內)

Below the three character inscription, cast in the vessel, are two small dragons facing each other. Here it is well to note that the dragons, which are purely decorative, and the inscription are placed together, a practice which because it disappears in later types serves to indicate an early period for this mask. Such an arrangement occurring frequently on Shang military implements, sometimes so confuses the characters with the decoration as to make them indistinguishable. The two characters Ts'e and Pu are written within the Ya, which is a symbol occurring on the Shang oracle bones and bronzes, the Early Western Chou bronzes and in early classics. We know from these sources that Ya was a title similar to the titles bestowed on the group of the feudal lords. Gradually the Ya became the symbol of a special class and was often combined with a clan name, as, in this case it is combined with Pu. The clan name was frequently written within the square of the character Ya, but occasionally outside. The character Ts'e served a function similar to Ya on the earlier bronzes indicating a special class. It was often combined with a clan name. The character Pu is the archaic form meaning "not," the same type of script occurring on the oracle bones and early bronzes.

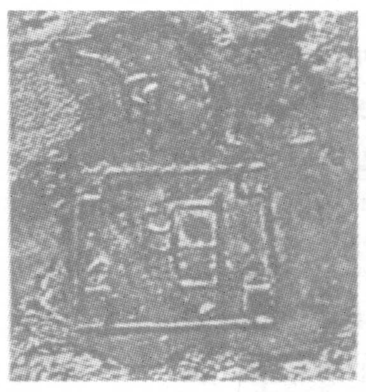
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RECTANGULAR-TYPE *TING* 38.1115 Inscription: "YA, CH'I, FATHER I."

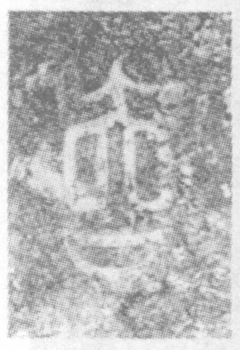
亞 啓 父乙 (啓字在亞字內)



This type of *ting* is common to the Shang and the Early Western Chou periods. Within the Ya is the clan name Ch'i, meaning that this vessel belonged to the Ya-Ch'i clan. Fu I has the meaning of "Father I." It was the custom in the Shang royal family to give a name to their ancestors, using a character from the twelve "celestial stems." The character was also a day-name, marking the name of the day on which the sacrifices to that particular ancestor were made, and the character I is so used here. In early bronzes the simple inscription indicated only the clan to which the vessel belonged and the day-name of the deceased for whom the vessels were used in the sacrifices. At a later time the name of the donor, a descendant of the family which gave the vessel, was included and then the time and the special events which the vessel commemorated.

Shang Dynasty

CHIA 46.4



The characteristics of the *chia*, like the *chüeh*, are two small pillars, one handle, and three legs (four if the body is square). The *chüeh* has in addition a spout-like lip. A pictographic character of this type of vessel on the oracle bones gives the name for this bronze.

A similar *chia* is shown in *Hakkaku*: pl. 18. An inscription on the inside bottom of the body reads "Ling," a clan name, which appears on both the oracle bones and the Shang weapons.





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CHIA 26.1599

The style of this vessel is somewhat different from the above and appears to be a little later.

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LEI 38.17

This type of wine container was used only during the Shang period. The water container type of *lei* is more squat and rounded, and generally without a lid. It is recorded that a *shao*, a spoon or ladle, was found within a certain *lei* when it was unearthed. The *shao* was used to transfer the wine to other vessels.

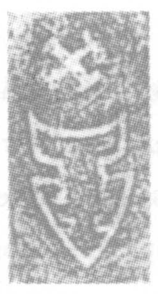
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Shang Dynasty

KU 37.2 Inscription: "YU, K'UEI."



The name *ku* belongs to the third name class: its occurrence in early classical works is our only means of classification. The shapes *ku* and *chia* both disappeared after Early Western Chou. Yu is the clan name and K'uei is an abbreviation for Father K'uei. A rectangular-type *ting* is known with the same inscription unabbreviated.

TSUN 36.139

This form is sometimes called *chih hsiao*. Only within the final years of Western Chou and after its close do the vessels lose this fantastic dragon-and-animal decoration and take on naturalistic decoration of real animals, birds, and people.

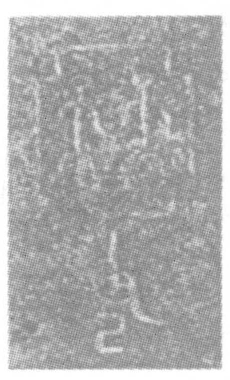
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KUEI 26.1827 Inscription: "YA, PING, FATHER CHI."

亞 並 父己 (並字在亞字內)



The decoration is typical of Shang times. There are other vessels which bear the same inscription also dating in the Shang era. The clan name Ping is a combination of two T'ien and is written within the Ya. As we know, Ping meaning "to stand together" is a combination of two Ta, figures of men standing on the earth. The character T'ien is a little different from Ta in that it emphasizes the head. Here, this character is read as Ping because the two characters T'ien and Ta were at this time interchangeable. A simple cross-hatching under the foot is more usual than the well defined decoration found here.

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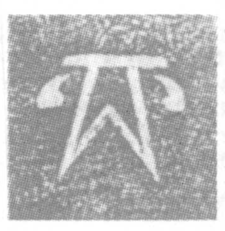
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TING 28.167 Inscription: "PING."

丙(?)



Here, as in the *chia* and the *chüeh*, the three legs are placed to make heating easy. The two "ears" were used when the vessel was removed from the fire with hooks. The one character inscription is a clan name, which we cannot read with assurance, but which is probably Ping.

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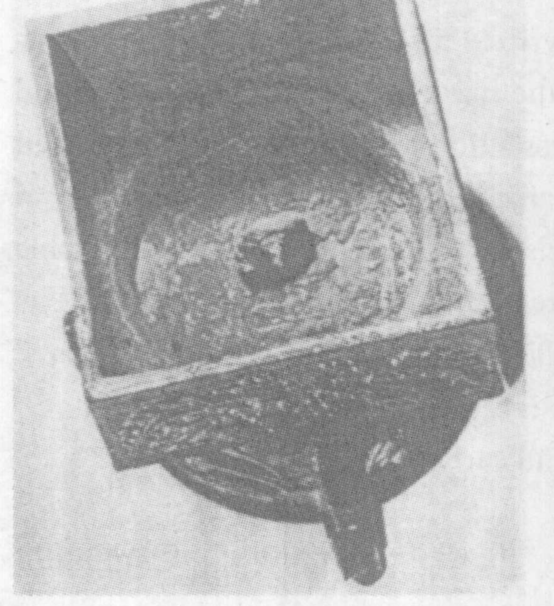
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Early Western Chou Dynasty

KUEI 27.316 Inscription: "CHUNG-CH'ENG MADE (this) ENTERTAINING (and) PRECIOUS VESSEL (for the) USE OF THE KING (when) ABROAD (and) AT HOME." (See pl. XXII)

中爯作又寶彝
用鄉王逆口



Chung-ch'eng is the name of the donor. Here chung indicates the second-born son. The first-born was called "po" the second "chung," the third "shu," and the youngest "chi." The purpose in making this vessel is clear from the inscription. It was made for the king. The donor was either an attendant or an officer of the king. It should be noted that this is not a sacrificial vessel. The character translated "entertaining" indicates its use as festive rather than sacrificial.

The main body of this vessel bears dragons in a plastic decoration, each with a pair of small conical bosses in the space of the opened mouth. Similar handles and this typical decoration are also found on the important *T'ien Wu kuei* (cf. Jung Keng, *The Bronzes of Shang and Chou*, vol. II, pl. 298). The *T'ien Wu kuei* has four handles and its base repeats the decoration of the body, while this *kuei* has two handles, two flanges, and the decoration of the base is different from the main body; nevertheless, because of the type of dragons we may consider them as contemporary vessels.

The first half of the inscription on the *T'ien Wu kuei* says, "On the day *i-hai* the King performed a great ritual. The King (in a boat) was rowed in three directions. The King sacrificed in Heaven's room, and gave T'ien Wu protection. The King sacrificed to The King, the Honorable Father Wen Wang, (and) sacrificed to Shang Ti. . . ." Thus we learn the king was Wu Wang, Wen Wang's son who succeeded to his reign. As we know from the histories that Wu Wang reigned three years after the conquest of Shang, the *T'ien Wu kuei* was probably made between 1027 and 1025 B.C. Our *kuei* may be a little later than this date, ca. 1020 B.C., in the earliest days of the reign of Ch'eng Wang.

An example of a similar bronze which retains its bell is pictured on pl. 793 in Jung Keng's *Bronzes*, vol. II.

The last five characters which we translate "for the use of the king when abroad and at

home" also occur on the *Ling kuei* in the David-Weill Collection, and on a *kuei* in the Freer Gallery. Both of these vessels are with similar bases and the decoration is in the style of Early Western Chou.

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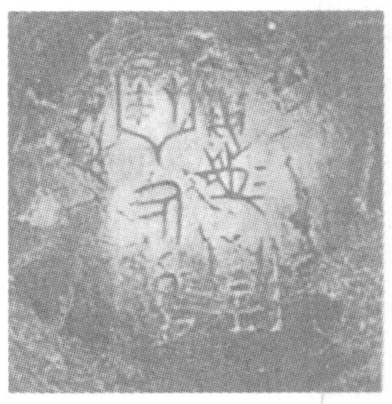
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TSUN 36.138 Inscription: "CHIEN MADE (this) PRECIOUS SACRIFICIAL VESSEL."

見作寶尊彝



In the Early Western Chou the entire body of the *tsun* was often covered by a *t'ao-t'ieh* or by a frieze of them. Our *tsun* shows an exceptional decoration of birds. The Victoria and Albert Museum in London has in its collection a *yu* with similar decoration. Later, in Middle Western Chou, the bird decoration was often used but with another kind of bird. The birds of this *tsun* are like those found on the stand of our *kuei* but are, perhaps, a little later in time. In the inscription, Chien is named as donor. This bronze was used in sacrificial ceremonies.

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FANG I 32.971 Inscription: "YUNG TZŬ MADE (this) PRECIOUS SACRIFICIAL VESSEL."

玆子作寶尊彝



The *fang i* was probably a wine container; this hypothesis is based on the similarity of its lid to the lid of the *lei* described above (38.17). A square *tsun* is known (*Hakkaku:* pl. 5) with the same decoration and bearing the same inscription. On the base of the *fang i* there is a single small conical boss within the opened mouth of the dragon, an unusual feature. Yung Tzŭ is the donor's name.

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Early Western Chou Dynasty

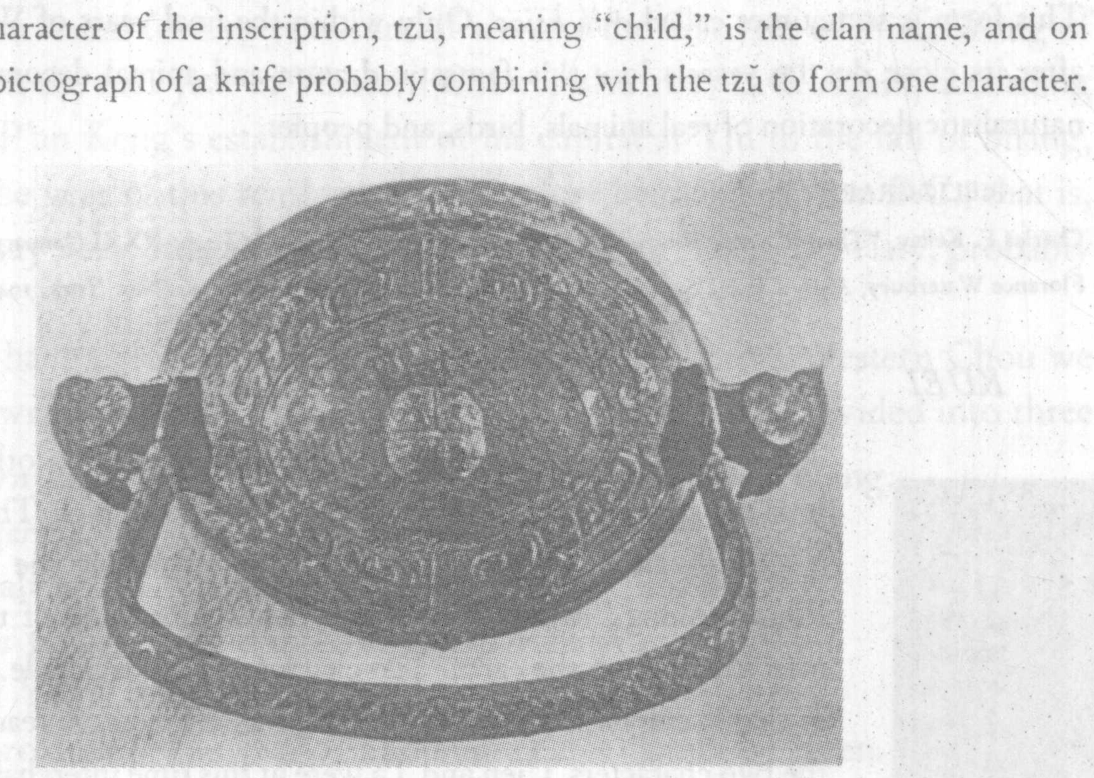
YU 27.602 Inscription: "TZŬ, FATHER K'ENG."

刀子刀父庚



Both the *yu* and the *hu* are wine containers derived from a common source. From the form of the character *hu*, found on oracle bones and bronzes, we assume that a *hu* has three essential characteristics: one, two "ears" on the shoulder; two, a lid; and three, the height must be greater than the width. The difference between the *hu* and the *yu* is that the latter has a swing-handle; the *yu* in development becomes gradually more squat in shape with a wider mouth and elliptical in section. Because of their common source, some *hu* are referred to as *yu* in their inscriptions.

The first character of the inscription, tzŭ, meaning "child," is the clan name, and on both sides is the pictograph of a knife probably combining with the tzŭ to form one character.



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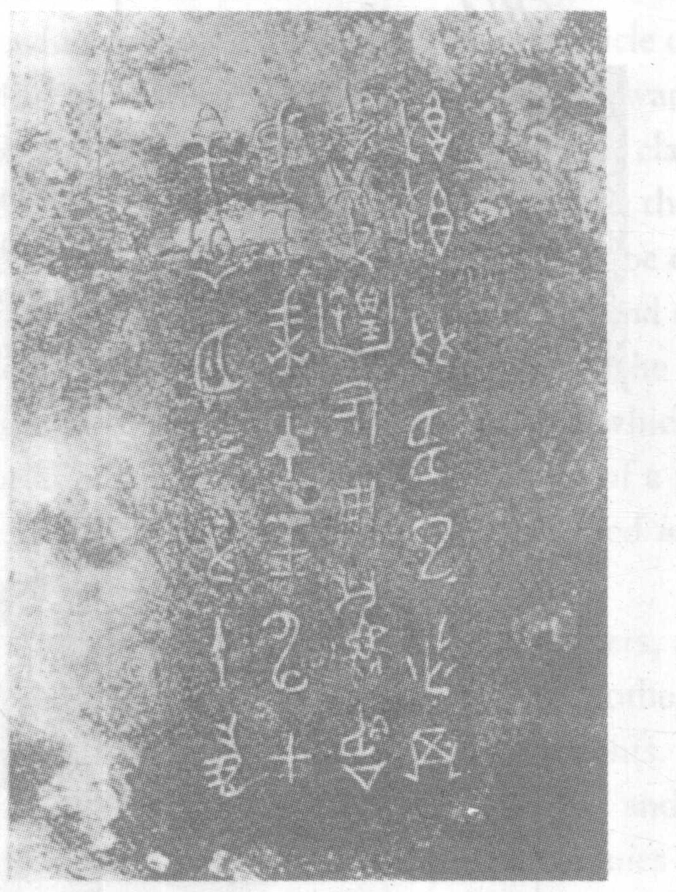
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KUEI, YÜ-TYPE 27.1432 Inscription: "IN THE ELEVENTH MONTH, FIRST QUARTER, (on the day) *CHIA-SHEN*, THE KING WAS IN HUA. THE KING GAVE MING DEER. (Ming) THEREFORE MADE (this) PRECIOUS VESSEL. MAY MING ALWAYS (use this) *KUEI* TO ENTERTAIN MANY FRIENDS."

This bronze is another example of the non-sacrificial type. Usually the handles of the *kuei* curve gradually outward from the sides of the vessel, but here they bend vertically upward. There are several vessels with similar shape: the Toledo Museum and the Freer Gallery each have such a vessel but without the lid. This type is of Early and Middle Western Chou.





Early Western Chou Dynasty

惟十又一月初吉
甲申王才華王易
命鹿用作寶尊彝命
其永以多友𣪘飤

There is one drawing in the *Hsi Ch'ing Hsü Ch'ien*, vol. 16, p. 1, which is named as *yü* in its inscription. We might therefore consider this as a specialized type of *kuei* called the *yü*-type *kuei*, or simply *yü*. According to the *Shuo Wen* and Yen Shih-ku's commentary to the *Chi chiu p'ien*, *yü* is a vessel for containing rice. The inscription on this piece indicates why it was made: "In the eleventh month . . . when the king was in Hua" a person named Ming was given some deer by the king. Therefore Ming made this vessel for the entertainment of his friends. As we know, Hua was not the capital. Probably Ming followed his king to hunt at Hua mountain in what is now Shensi province, not far from the capital of that time. We know from other inscriptions that an animal is not a usual gift from the king, nor was it usual for the king to give audience at a place like Hua. From the decoration and the inscription we may say that this vessel was of the earliest days of Middle Western Chou. The script of this inscription is of a particularly beautiful style. It tends to have balance yet exhibits the strength of the calligrapher. We may call it a restrained but strong writing which afterward lost its energy but retained the balance, as we shall see in the long inscription of the *hsü*, (p. 154). The patination of this *yü*-type *kuei* is of exceptional beauty. The shape and decoration are both of high artistic merit. It is an excellent example of Western Chou bronzes. Its simple and quiet beauty is enhanced by the harmonious relationship of the decorated to the undecorated areas.

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Late Western Chou Dynasty



HSÜ *Inscriptions*

HSÜ 28.144

Late Western Chou Dynasty

This type of vessel first appears during Late Western Chou. Since it was derived from the *kuei*, it is referred to in inscriptions as *kuei* or as *hsü-kuei*, though it is a true *hsü*. Again, the inscriptions often qualify their vessels as "travelling *kuei*" indicating that this type was taken on journeys. In two respects it differs from the true *kuei:* its body is of oval shape rather than round, and the lid was developed as another vessel with supporting feet to rest upon when removed and inverted. In the same period a new type food container, the *fu*, appeared. *Fu* are similar to *hsü* except that they are rectangular in shape and there is no distinction between body and lid, for the upper and lower halves have become identical while in the *hsü* the lid, although a separate vessel, is smaller than the main body thus remaining a true lid Here the inscription is an important factor in the dating. It will be remembered that at first inscriptions cited clan names only and later added the name of the person for whom the vessel was intended. This in turn was followed by the name of the donor of the vessel. As the development proceeds the inscriptions begin to record a simple date and some event, so by the time of the Middle and Late Western Chou, the inscriptions have become quite long and give many details. Our *hsü* is a good example of this last stage.

惟十又八年十又二月初
吉庚寅王才周康穆宮王
令尹氏友史趛典善夫克
田人克拜稽首敢對天子
不顯魯休揚用作旅盨惟
用獻于師尹朋友昏遘克
其用朝夕享于皇且皇且考其
口口口口降克多福眉壽永令
畯臣天子克其日易休無
彊克其萬年子子孫孫永寶用

Inscription:

"In the eighteenth year, twelfth month, first third, (on the day) *keng-yin*, the king was in Chou (in) the K'ang mu palace. The king ordered the assistant to the Yin-shih, the recorder Hsin, to make a record of Shan-fu K'ê's field workers. K'ê bowed and bowed to the ground (and) presumed to praise the Son of Heaven's illustrious beautiful gifts; therefore (K'ê) made (this) travelling *hsü* to be used for the entertainment of the Shih-yin, of friends, and (for use) at weddings. May K'ê therefore, morning and evening use (it) to sacrifice to his great grandfather. May the great grandfather and father abundantly give K'ê many blessings from above, long life, (and) eternal order. (K'ê) submits to the Son of Heaven. May K'ê daily be given gifts without limit; may K'ê (live) ten thousand years (and may his) sons and grandsons always treasure and use (this vessel)."

Late Western Chou Dynasty

From the inscription we learn that in the twelfth month and eighteenth year of a certain king, that king gave audience at a temple in Chou, the capital. The king ordered the Recorder, Hsin, to make a record of K'ê's farm hands. K'ê's title of Shan-fu is mentioned in the inscription, an official corresponding to the rank of Censor or Steward. Hsin was the assistant to the Yin-shih. Yin-shih was the title of a high secretarial official, while Hsin's title was Recorder, working under the direction of the Yin-shih. Because the king bestowed honors on K'ê, K'ê made this vessel to use with his family, friends and the Shih-yin. Shih-yin is the title of another high official. The latter half of the inscription is devoted to the blessings K'ê hoped to receive from his ancestors in return for the sacrifices.

Several other important vessels were made by this same K'ê. One of the inscriptions, on a *ting* which has two inscriptions, reads for the first one:

"K'ê said, 'Austere (was) my refined grandfather Shih Hua-fu; wise (and) diligent was his heart, quiet and calm in planning; good and respectful was his virtue; therefore he could loyally protect his sovereign, Kung Wang. (He, Shih Hua-fu) remonstrated with (and) directed the royal family for the benefit of the myriad of people, comforted the distant, (and) befriended the near, (and) therefore was known to Great Heaven, (and) was respected by high and low. (He) was pure (and) without blame, was blessed without limit (and) was always remembered by His (i.e., Kung Wang's) Grandson, The Sovereign, the Son of Heaven. The Son of Heaven, illustrious and reverential, paid honor to the spirits, long remembering his noble guardian, my grandfather Shih Hua-fu. K'ê was promoted in rank making it his royal duty to give and receive the king's orders and received many precious gifts. Illustrious is the Son of Heaven. May the Son of Heaven live myriads of years without limit, protect and govern the Chou kingdom, and govern the four quarters.'" (*San Tai Chi Chin Wen Tsun* 4:40–41).

From this inscription we know that K'ê's grandfather Shih Hua-fu, was a guardian contemporary with Kung Wang. The king whom K'ê served is, then, the grandson of Kung Wang. (According to Ssu-ma Ch'ien's Annals of Chou, Kung Wang was succeeded by his son I Wang, and I Wang was succeeded by Kung Wang's brother Hsiao Wang, and Hsiao Wang was succeeded by I Wang's son Yi Wang. But Ssu-ma Ch'ien in his table of the Three Dynasties said that Hsiao Wang was the brother of I Wang. In either case Yi Wang is the grandson of Kung Wang). The Wang (king) mentioned on this *hsü* and on the *ting* just discussed can therefore be determined as Yi Wang. There is another *Yi kuei* contemporary with K'ê's set of bronzes which records the 27th year of the king (Yi Wang); we are thus in a position to suggest that Yi Wang's reign lasted for about thirty years. As we know the first year of Kung Ho was 841 B.C., and that Li Wang reigned about sixteen years between Yi Wang and Kung Ho; Yi Wang's reign was probably between 887 and 858 B.C. If our reasoning is correct, this *hsü* was made about 870 B.C.

This illustrates the value of a comparative study of inscriptions in dating a group of vessels, for such inscriptions serve as direct and authentic material to aid in the reconstruction of the history of Western Chou. For this period reliable written documents are almost a blank.

Late Western Chou Dynasty

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HU 24.233 and 24.234

The spiral horns of the animal head handles shed some light on the probable date, suggesting them to be contemporary with the *hsü* above. There is a *Sung hu* (Wu Yin Palace Collection, Chinese Government) which has a decoration on its main body quite similar to this. The vessels of that *Sung* group can be dated approximately in Late Western Chou, and these *hu* would be of the same class. The earlier *hu* had no rings through the "ears" at the sides of the neck, but from this time on such rings become quite common.

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P'AN 29.647

Late Western or Early Eastern Chou Dynasty

The bands in quasi-geometrical pattern around the rim and base of this *p'an* are similar to those found on our *hsü*, and the pattern of vertical scales at the base is typical of the decoration of Late Western Chou. (There is an *Yi kuei* which can be dated to the 27th year of Yi Wang which shows a very similar treatment except for the handles and the base. See *San Tai Chi Chin Wen Tsun* 9:20b.) The three human figures upon which the base of the *p'an* rests possibly represent dwarfs, slaves, or foreigners. This is a new development. As we have said before, from Shang down to the final years of Western Chou such realistic figures of birds, animals, and people, do not appear. We may therefore date this vessel after Li Wang, perhaps within the close of Western Chou, perhaps within the earliest years of Eastern Chou.

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MASKS (Chariot Ornaments) 30.364 and 30.365

Eastern Chou Dynasty or Earlier

The excavations carried out by the *Academia Sinica* for 1932-33 in Tsün-hsien of Honan province uncovered similar pieces in a royal tomb of the Wei state. They were buried with chariots and it may be fairly conjectured that they were chariot ornaments. One piece in the

Eastern Chou Dynasty or Earlier

shape of an ox's head in the Ts'un Ku Chai Collection bears the inscription, "Wei troops' ornament." In the excavation at Tsün-hsien a round piece was unearthed bearing the same inscription. Wei was the name of a state located in what is now Honan province, and this state was near the Shang capital. From the shape of the weapons found together with this kind of ornament, they would seem to date during the Early Western Chou.

There is an early Chou *kuei*, *Hsiao-ch'en Ts'e kuei*, whose inscription reads, "Ts'e was given an ornamental metal chariot," possibly referring to a chariot decorated with this type of ornamental metal piece. Another mask, mate to the Art Institute mask, is in the David-Weill Collection (cf. *Catalogue of the International Exhibition of Chinese Art*, London, 1935-6, No. 146).

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CHUNG 24.243

This *chung* has a special and peculiar design, possibly because it was made for use in burial. Although the molds were carelessly adjusted, the quality of the surface is very delicate. The light plastic snake-like animals at the top and bottom of the bell proper are particularly rare. Judged from the shape this *chung* may be tentatively dated Early Eastern Chou or possibly Late Western Chou. Those *chung* showing the type of handle seen here are not later than the middle of the Ch'un Ch'iu period.

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Ch'un-Ch'iu Period

PO 38.1335

The handle of the *chung*, a stout stem, as we have seen, was a derivation from the Shang-time *nao*, but the *nao* is smaller in size and was held in the hand with the mouth upward. The *chung* was hung from a frame, mouth downward, the handle having been cast with a metal loop for attachment to the supports. During the Middle Ch'un Ch'iu, the handle proper was replaced by the *niu*, an ornate knot-like arrangement. Afterward a single loop replaced the *niu*. While the lip of the *chung* was cut in an inverted curve the bottom of the *po* was designed to rest on a plane. This type was named *po* in several Ch'i state vessels, though some of the *po* are recorded as *chung*. Although *po* is the name given in the dialect of Ch'i, it is now generally used to designate this new type of *chung*.

Ch'un-Ch'iu Period

This bell, in some ways similar to the *Ming po* of Ch'i state, which is dated ca. 574 B.C. by its inscription, may consequently be dated to the Middle Ch'un Ch'iu period.

LU 29.648



The chain was used to suspend this vessel over the fire, and the hand-shaped grips indicate it could be easily carried. A rectangular *lu* found in Hsin-cheng is named *lu* in its inscription. The *Shuo Wen* says, "*Lu* is a vessel used for frying and broiling." Two such *lu* were found in Shou-hsien, one rectangular and one round but both with chains. (cf. *Catalogue of the International Exhibition of Chinese Art*, London, 1935-6, No. 102). The special type of hooked spiral relief on this vessel is similar to the decoration on the *po* (pl. XLIV).

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Late Ch'un-Ch'iu Period

FU 24.242

Three *fu* similar in type were found at Hsin-cheng; another from Shan Chai's collection was made by the state of Hsü. Both Hsin-cheng and the state of Hsü are in the southern part of modern Honan province. It is possible, therefore, but not at all certain, that this piece also came from that general area. Judged from the inscriptions on similar *fu* and the decoration on other vessels this *fu* may be dated Late Ch'un Ch'iu. When the ornamental pattern of this *fu* is compared with that on the vessels of Late Western and Early Eastern Chou, its delicacy of execution will readily be noted.

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Osvald Sirén, *A History of Early Chinese Art* (London, 1929), Pl. 103B.

Sueji Umehara, *Etude des Bronzes des Royaumes Combattants*, The Academy of Oriental Culture Kyōto Institute (Kyōto, 1936), Pl. L.

Sueji Umehara, *Shina-kodo Seikwa* (Osaka, Yamanaka & Co., 1933), Pt. I, Vol. III, Pl. 178.

CHIEN 30.704

Since the character *chien* represents a man using a basin as a mirror, and the character also has the meaning of "mirror" and "reflection" the *chien* was, doubtless, a water-basin used as a mirror. The large *chien*, such as the *Fu Ch'a chien* of Wu state once in the Oeder Collection, is of the size used for bathing. In later times the *chien* was used to hold ice. The decoration of

Late Ch'un-Ch'iu Period

our vessel is reminiscent of that on a pair of *chien*, one in the Freer Gallery and the other in the Pillsbury Collection, originally from Chih state. The similarity also extends to the decoration on a pair of *hu* in the Cull Collection. We have made a particular study of these *hu* and date them at the end of the Ch'un Ch'iu. A characteristic of this *chien* is the braid pattern which appears frequently on the Li Yü bronzes and on those which come from the state of Chin. The Buckingham bronze can then be dated as a Chin vessel around the close of the Ch'un Ch'iu.

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Chan Kuo Period

TING 26.384

There are several *ting* of similar shape and decoration in the Wu Yin Palace Collection, in the William Nelson Gallery of Art, in The Metropolitan Museum of New York, and in the Museum at Gothenberg. All have three small ring attachments on the cover and "ears" bent in an upward curve.

BIBLIOGRAPHY

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PIEN HU 37.1

Closely analogous in both shape and decoration are several flat *hu* in the National Museum of China, in the Pillsbury Collection, in the Imperial Museum in Tokyo, in the Museum van Aziatische Kunst in Amsterdam, in the Yamamoto Collection, and in the Ts'un Ku Chai Collection. Here the plain flat band is substituted for the braid pattern. For ordinary use this vessel was made of bamboo or even of oiled paper and was enclosed in a meshed holder usually of cord.

BIBLIOGRAPHY

Ludwig Bachhofer, "Bronze Figures of the Late Chou Period," *The Art Bulletin* XXIII (December, 1941), Fig. 12.

HU 30.481

It is claimed that this kind of vessel was found in Chin-ts'un of Lo-yang.

Chan Kuo Period

HU 28.143

There is a similar *hu* in the Fuji Collection in Kyōto.

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HENG AND *TAI-KEU*

The decoration of all these pieces is in so-called Chin-tsun style.

CHARIOT FITTINGS 32.972 and 32.973

BIBLIOGRAPHY

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TAI-KEU 30.703

BIBLIOGRAPHY

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The University Prints, Series O, Section II, Early Chinese Art (Newton, Mass., 1938), O 115.

HO 30.366

This vessel was used as a wine heater. In later times tea pots were patterned after the *ho*.

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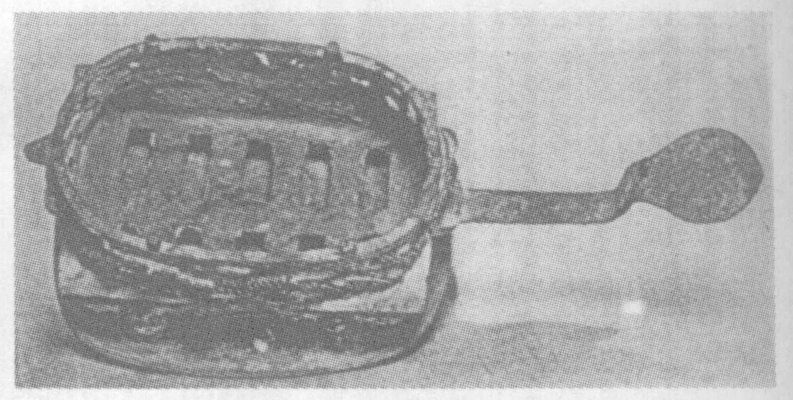
Sueji Umehara, *Etude des Bronzes des Royaumes Combattants*, The Academy of Oriental Culture Kyōto Institute (Kyōto, 1936), Pl. LXIII.

Chan Kuo Period

SMALL *LU* AND *PEI* 30.362 and 30.363

This type is recorded in three Imperial Ch'ing Dynasty catalogues, but is mistakenly called an "ice-container." The *Shuo Wen* says, "*Lu* is a square-*lu*." According to the *Tso Chuan*, the third year of Ting Kung, we know charcoal was used in *lu*. This pair of *lu* is of such small size that they could only have used charcoal. The shape of the cups appeared first during the *Chan Kuo*, and were sometimes made of jade, silver, or lacquer ware.

In the Eumorfopoulos Collection was a pair of braziers which lack the cups but are almost identical with our pieces.



BIBLIOGRAPHY

Osvald Sirén, *Kinas Konst Under Tre Artusenden* (Stockholm, 1942), Vol. I, Pl. 64D.

Han Dynasty

宜子孫吉

TENG 30.907 Inscription: "WELL FOR SON (and) GRANDSON. LUCK."

This type of lamp was first collected by Mr. Li of Lu-chiang during the Sung Dynasty, and drawings of them were published in the great Sung catalogue *K'ao Ku T'u*. The decoration and inscription are the same as on this piece. In the Eumorfopoulos Collection there were a pair, and there were three in modern Chinese private collections, two with missing lids, but with the same decoration and inscription. Such good-will phrases were often inscribed on Han mirrors, girdles and *hu*. They were made by craftsmen to please the buyers.

HU (*CHUNG*) 27.315

During the Han Dynasty the *hu* came to be called *chung*. There is a *Kuan I Chia hu*, slender in body and with lid and chain in the David-Weill Collection.

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Sueji Umehara, *Shina-kodo Seikwa* (Osaka, Yamanaka & Co., 1933), Pt. I, Vol. III, Pl. 223.
The University Prints, Series O, Section II, Early Chinese Art (Newton, Mass., 1938), O 121.

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HU (*CHUNG*) 24.241 Inscription: "EAST PALACE, SEVEN."

Han Dynasty

東宮七



The three characters, incised on the neck reading, "East Palace, Seven," refer to the number of this particular vessel in a series of vessels made at one time. The East Palace was a place where the heir-apparent, or occasionally the Empress, lived.

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Sueji Umehara, *Shina-kodo Seikwa* (Osaka, Yamanaka & Co., 1933), Pt. I, Vol. III, Pl. 225.

MINIATURE *CHUNG* 29.283



This small gilt bronze jar is an almost exact replica of the large *Chung*.
Height: 4 inches (10.2 cm.)





PAIR OF MINIATURE *CHUNG* 26.1832 26.1833

These miniature *chung* might have been toys or used for burials. They have been found in tombs.
Height: 2⅛ inches (5.4 cm.)

LIEN 28.145

This is probably a ladies' toilet case. A square *lien* found in Tsün-hsien is of an earlier type.

HU (*CHUNG*) 31.10

The square mouth of this *chung* makes it a combination of *fang* and *chung*, which is an unusual form. The figures on the body probably illustrate some mythological story. The *chung*

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Han Dynasty

in the Boston Museum of Fine Arts is identical in dimensions and in style of decoration but has four "ears" of a different design. In a Japanese collection (cf. *Hai Wai Chi Chin T'u Lu*, plate III) there is a *hu* of a similar shape with four "ears" and with its center part showing a decoration identical with that on the gilded *chung* of the Buckingham Collection. The discovery of more materials for comparative study will probably shed further light on this type, which now we know little about.

BIBLIOGRAPHY

Charles F. Kelley, "An Early Chinese Bronze Jar," *Bulletin of The Art Institute of Chicago* XXVI (January, 1932), 4–7.

KUEI 31.12

This vessel is of the same order as the square-mouthed *chung* noted above.

BIBLIOGRAPHY

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PIEN HU 37.122

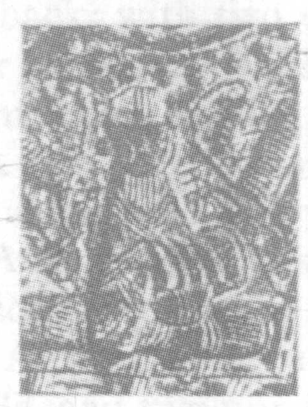
The extraordinarily high artistic merit of this piece is comparable to the gilded *hu* mentioned above (pl. LXXIV). The decoration of the front and back in a lozenge pattern makes a very effective foil for the moving and dynamic figures on the shoulder and neck.





CHING (MIRROR) 29.644

王公



There are two characters on this mirror meaning "Prince" and "Duke." This kind of good-will sentiment was made by the craftsman to please the buyers.

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SMITHSONIAN INSTITUTION

FREER GALLERY OF ART

ORIENTAL STUDIES, NO. 3

A DESCRIPTIVE AND ILLUSTRATIVE CATALOGUE OF CHINESE BRONZES

ACQUIRED DURING THE ADMINISTRATION OF

JOHN ELLERTON LODGE

(WITH 50 PLATES)

COMPILED BY

THE STAFF OF THE FREER GALLERY OF ART

(PUBLICATION 3805)

WASHINGTON

1946

CONTENTS

PREFACE

For the first 22 years of its existence, 1920–1942, the Freer Gallery of Art was under the wise and able direction of the late John Ellerton Lodge. During this period Mr. Lodge added to the original Freer collection many works of major importance in the fields of Chinese bronzes, paintings, jades, sculpture, and ceramics; Indian paintings, sculptures; Arabic, Persian, and Armenian manuscripts and paintings; Syrian and Persian glass, pottery, and metalwork.

A gifted linguist with the highest standards of scholarship, Mr. Lodge carried on no small amount of research work during the years at the Freer Gallery. He recognized the uncertain ground upon which many of the current ideas of things Chinese were based; therefore he published nothing, feeling that his first task was to build a significant collection in every department in accordance with terms of the foundation. On the other hand he was ever generous to those who wished to use Freer Gallery material in their publications, giving freely of the results of his own research work. He often used to say, "The Freer Gallery is my publication," and, indeed, the impeccable standard set by him, and the quality of the acquisitions, more than justified this view. The standard thus set was predicated on the ground that for inclusion in the collection, a given object, within its kind, must be of the highest quality in both conception and execution. The objects acquired as a result of this unwavering standard form a monument to the wisdom of this procedure. Now, however, it seems fitting that some of the results of this work be published by continuing the *Oriental Studies* series begun under our late Director's administration. This volume contains reproductions of 56 Chinese bronzes from among those acquired by Mr. Lodge, together with such comments and studies as he made for the Freer Gallery records. These records, it will be noted, are initialed[1] and dated, and since certain of them are of some years' standing and had not been revised in the light of more recent discoveries and researches, additional notes have been added as we know Mr. Lodge would have wished.

In the preparation of this book we have been deeply indebted to all members of our staff, particularly to Miss Grace Dunham Guest, Assistant Director, for her help and many wise suggestions; to Miss M. Eleanor Morsell, Illustrator, for all the drawings appearing in the text except those on pages 63 and 68, which were done by Benson Moore; and to Burns A. Stubbs, Assistant to the Director, whose outstanding photographic work has made possible the fine quality of the reproductions. John A. Pope, Associate in Research, has collaborated with the writer in all phases of research and preparation of this book which we hope may be a fitting memorial to John Ellerton Lodge.

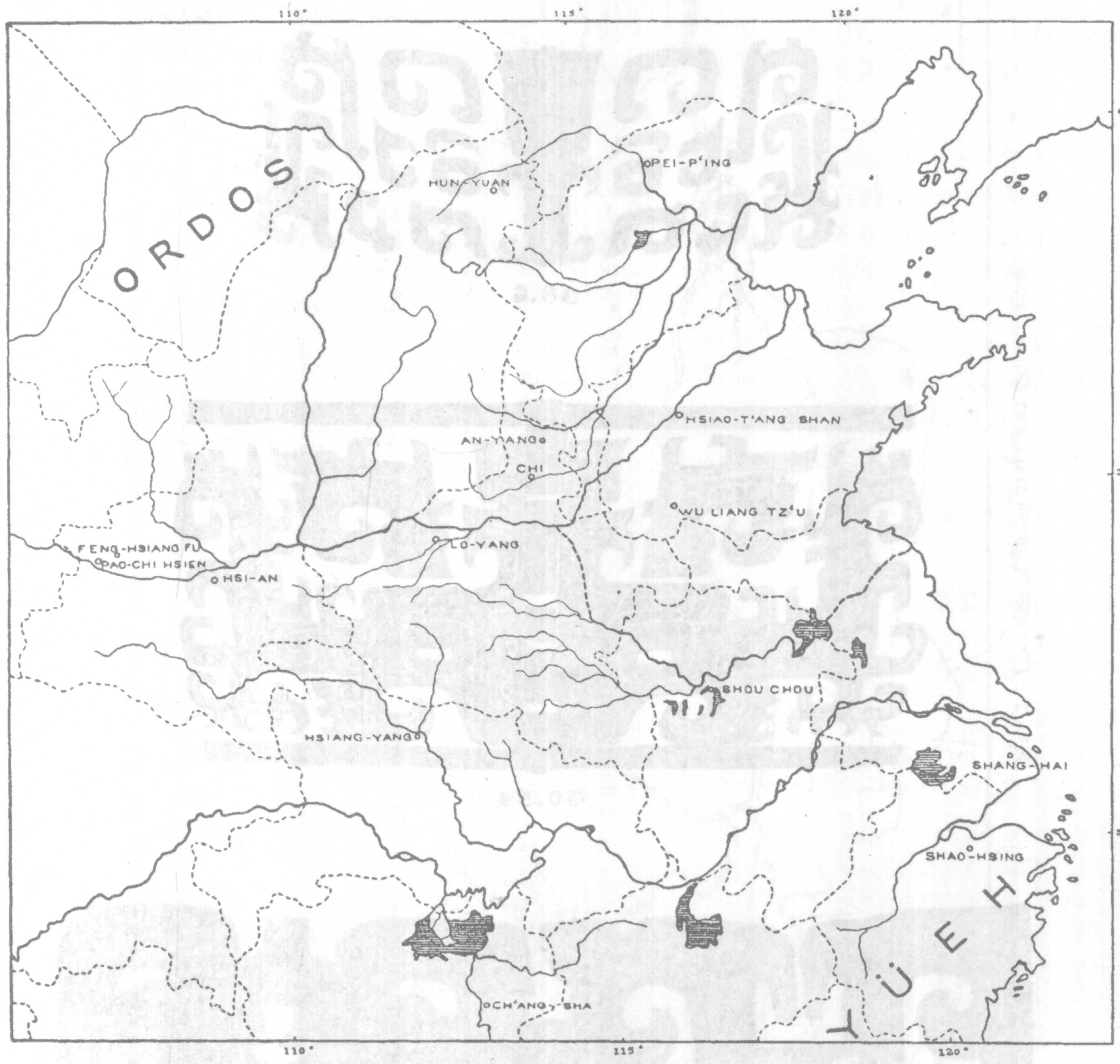
A. G. WENLEY.

FREER GALLERY OF ART,
OCTOBER 1944.

[1] J. E. L.—John Ellerton Lodge; A. G. W.—A. G. Wenley; J. A. P.—J. A. Pope.

INTRODUCTION

Since the excavations at An-yang in 1929 practically the whole of our ideas about the dating of early Chinese bronzes has changed. Furthermore, a whole new Chinese literature has sprung up which relates not only to excavations but also to epigraphy, ranging from that on the Shang oracle bones down through the Chou



MAP 1.—Partial map of China.

dynasty bronzes. Attempts have also been made to collate the historical events described on bronze inscriptions, and from these in some cases accurate dating may be had. In addition to these, there have been stylistic studies, notably those by Karlgren (**27**; **29**) and later by Jung Kêng (**21**). Despite these and their frequently



John Ellerton Lodge, 1878-1942

attractive and plausible theories, we still lack the factual knowledge that it is to be hoped will be forthcoming in post-war archeological researches. The actual historical dates and sequences before 841 B.C. are open to question, although it is interesting to note that Wu Ch'i-ch'ang's application of the *San t'ung li* calendar (**87**) to the Chou dynasty meets Tung Tso-pin's work on the Shang calendar (**69**), tending to verify 1122 B.C. as the beginning of the Chou dynasty. Still, plausible as these calendar theories are, they again are not yet proven. In view of the above we have not sought to divide the bronzes of the early periods minutely but have contented ourselves with the designations Shang, Chou, and late Chou, while as a matter of convenience the traditional chronology has been used.

The technique of early bronze casting has been treated elsewhere, notably by W. Percival Yetts (**92**), Orvar Karlbeck (**24**) and Jung Kêng (**21**). Suffice it to say here that we know now that piece molds keyed together with mortise and tenon were used, that it is quite possible that this technique was used both in direct casting and in combination with the *cire perdu* process. If the latter combination was used, it seems possible that the *cire perdu* process by itself may also have existed. In addition to these studies it may be observed that even fairly early bronze vessels were not always cast in one piece. That is to say that in a number of cases it is quite evident that functional and ornamental protuberances, such as handles, knobs, etc., have been cast separately and then attached to the vessel by some process of brazing. This also seems evident in the attachment of bail handles where the rings terminating the handles have been made in two halves, the lower half being thrust through the ring on the side of the vessel and then brazed to the upper half on the end of the handle. Among examples of this technique are the handles of two bronzes of the type *kuei*, 31.10 and 38.20, as well as the bail rings, cover knob, and four hooklike projections on a bronze *yu*, 30.26, all of which have been attached by brazing.

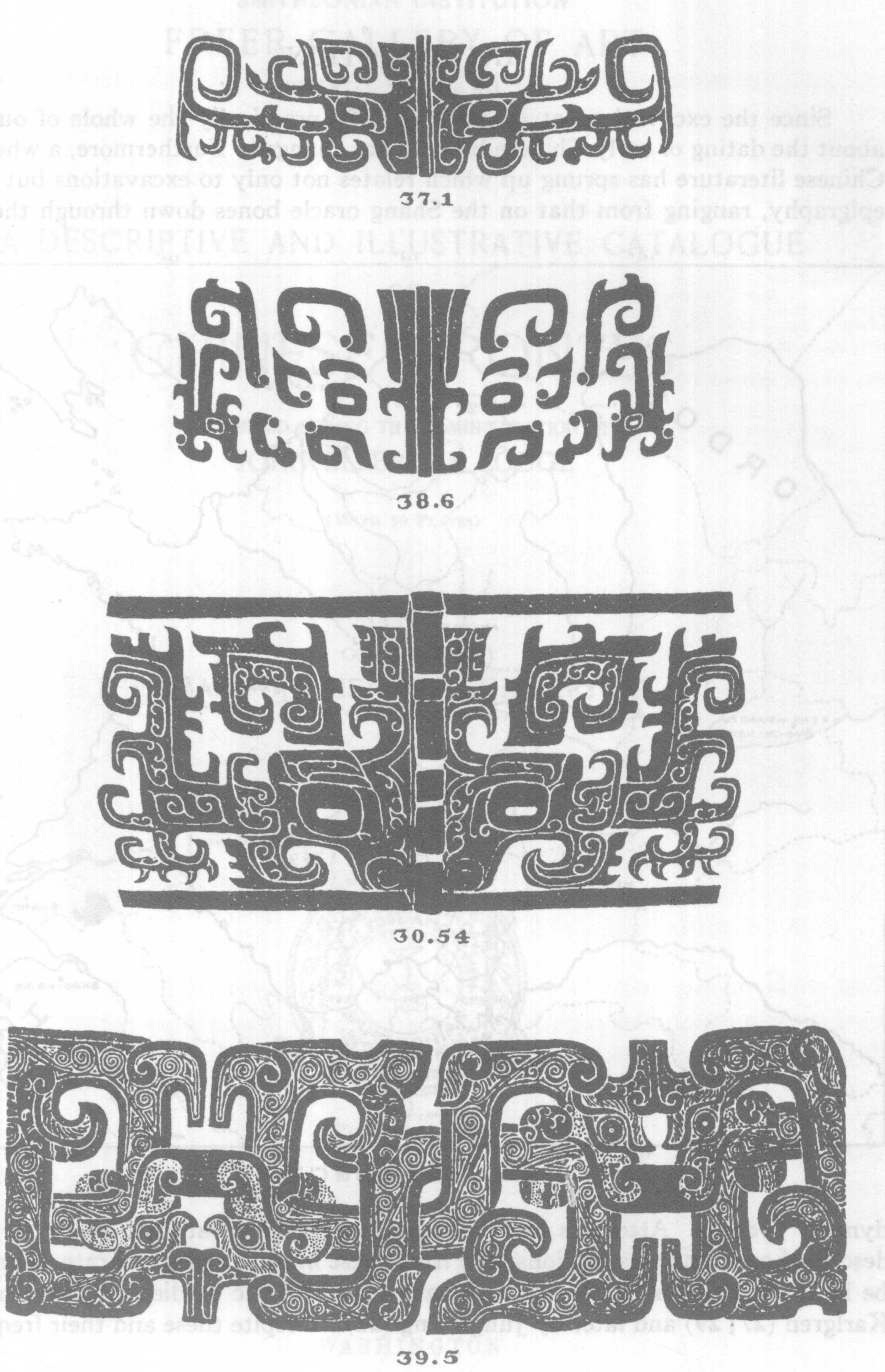
In regard to the names of types of vessels, we have adhered to the traditional names based in general upon Jung Kêng's classification with few exceptions. For convenient reference the following list of types, including weapons, occurring in this volume is given.

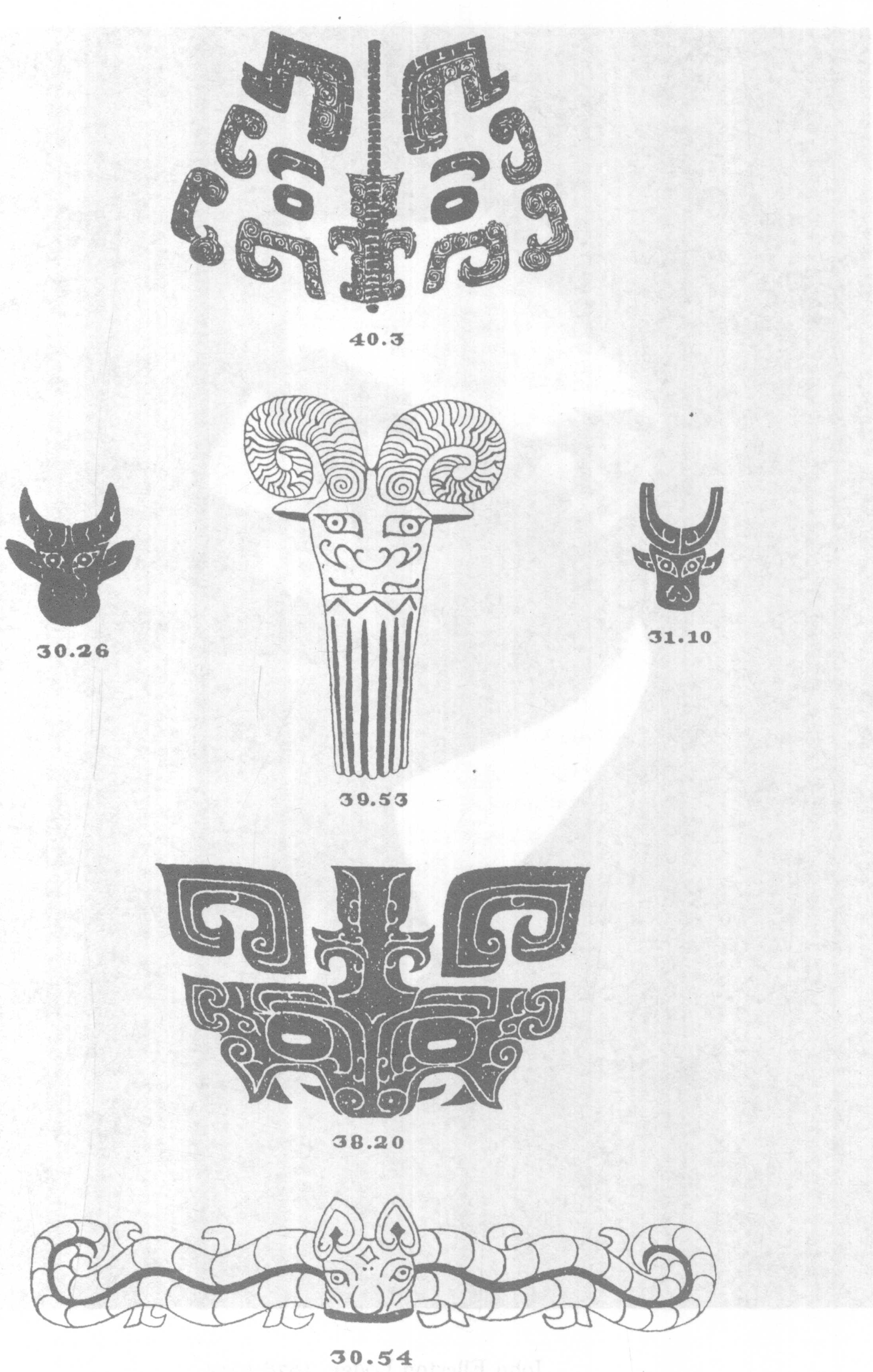
Ch'i 鏚: A kind of battle-axe.
Chia 斝: A round tripod, or square, four-legged vessel with handle on one side or at the back; with two uprights on lip; with or without cover.
Chien 鑑 (or sometimes *hsi* 洗): A large, deep basin, perhaps used for reflecting as the name *chien* implies, or for washing as the alternate name *hsi* implies.
Chien 劍: A two-edged sword.
Chih 觶: A small wine jar ovoid in section, usually covered.
Chung 鐘: A large clapperless bell to be sounded by striking from the outside; ovoid in section, with handle on top.
Chüeh 爵: A tripod wine cup with a troughlike spout; projecting lip behind; handle at one side, and two uprights on the lip.
Huo 盉: A covered wine vessel with spout for pouring, and handle; usually with three or four legs.

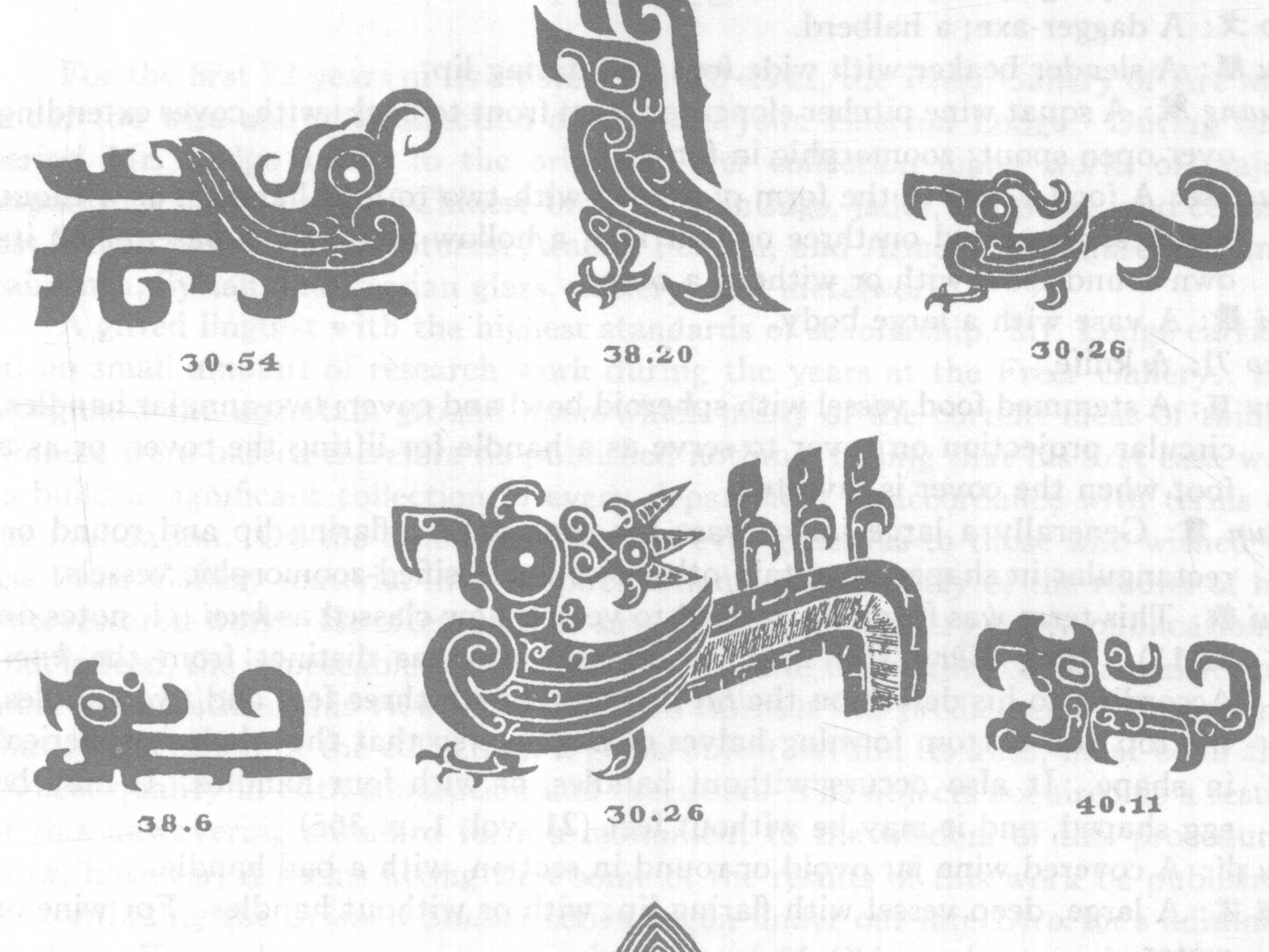
I 彝: A general term for sacral vessels often qualified by a descriptive adjective such as *fang* 方 "square." See No. 30.54.
Ko 戈: A dagger-axe; a halberd.
Ku 觚: A slender beaker with wide foot and flaring lip.
Kuang 觥: A squat wine pitcher elongated from front to back; with cover extending over open spout; zoomorphic in form.
Kuei 簋: A food vessel in the form of a bowl with two to four handles, or without handles, supported on three or four feet, a hollow rectangular base, or on its own round foot; with or without a cover.
Lei 罍: A vase with a large body.
Tao 刀: A knife.
Tou 豆: A stemmed food vessel with spheroid bowl and cover; two annular handles, circular projection on cover to serve as a handle for lifting the cover, or as a foot when the cover is inverted.
Tsun 尊: Generally a large jar or vase for wine with a flaring lip and round or rectangular in shape, or certain otherwise unclassified zoomorphic vessels.
Tui 敦: This term was formerly applied to vessels now classed as *kuei* (cf. notes on 32.13). Jung Kêng still uses this classification as distinct from the *kuei*. According to his definition the *tui* is a vessel with three feet and two handles, the top and bottom forming halves of a sphere so that the whole is spherical in shape. It also occurs without handles, or with four handles. It may be egg-shaped, and it may be without feet (**21**, vol. 1, p. 365).
Yu 卣: A covered wine jar ovoid or round in section, with a bail handle.
Yü 盂: A large, deep vessel with flaring lip; with or without handles. For wine or water.

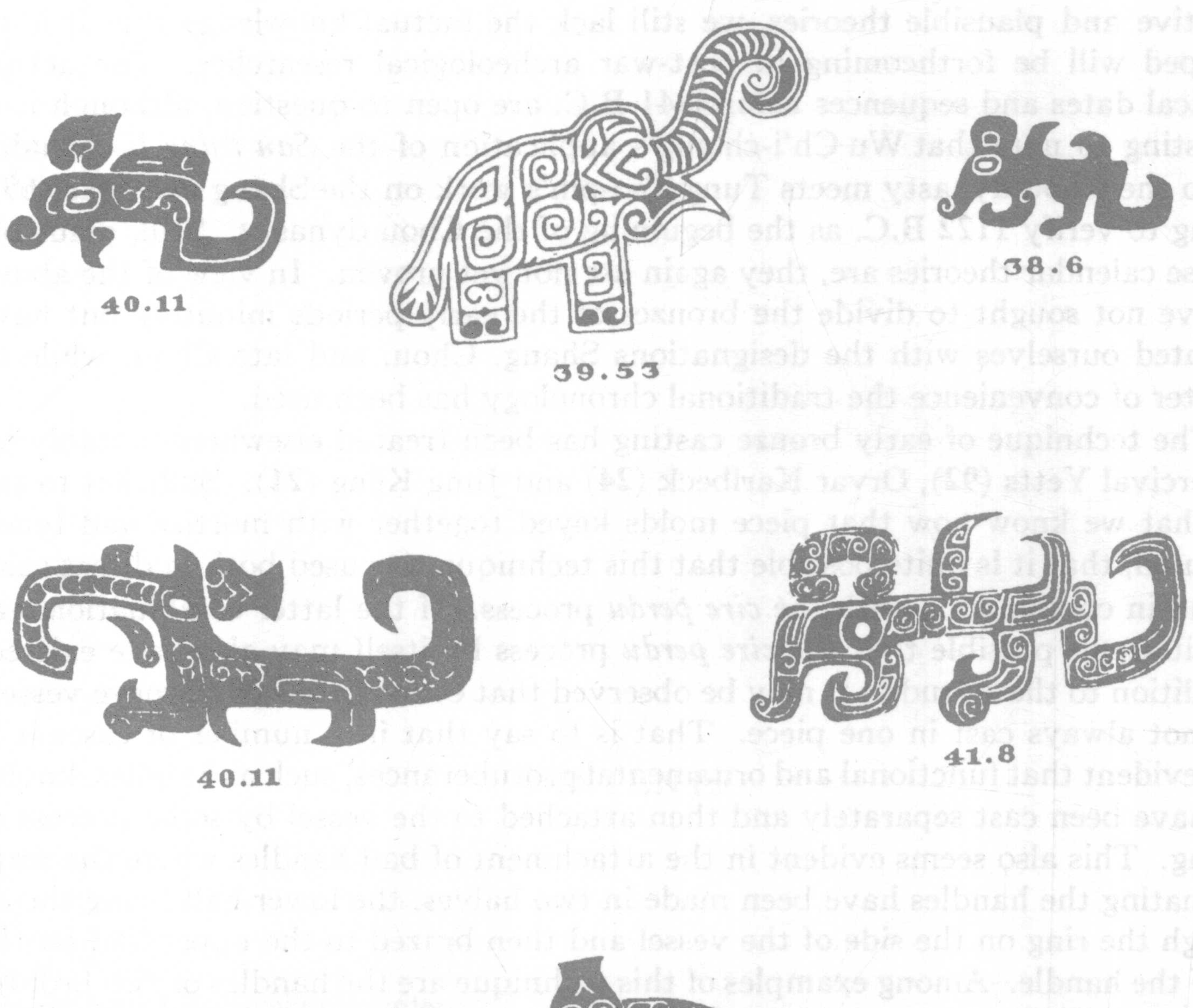
The designs with which the ancient Chinese bronzes are adorned seem at first glance innumerable. Actually most of them are great or small variations or combinations of the same elements. In his able chapter on the subject, Jung Kêng (**21**) has separated these designs into 77 named types of which as many as 32 seem to have had their rise in the Shang dynasty. However, it is noteworthy that among these again many are really variations of the same basic designs, and if one attempts to differentiate too much there is the possible danger of confusing differences resulting from personal and geographical factors with those of the time element. It is well known by simple observation that wide differences in decorative style occur in the same period. One example treated in this book is to be seen in Nos. 30.54 and 33.2 which may be only a year apart in time. That this should be so is perfectly natural, just as it is perfectly natural that there is a wide divergence in quality of bronzes of the same period. This is not to say that the question of decoration is not important. On the contrary, the work done in this field, particularly by Karlgren and Jung Kêng, is most important and contains, no doubt, much of the truth. Our present knowledge of the subject, however, is still inconclusive, for the bulk of our scientific archeological work is still to be done.

The designs, including the so-called *t'ao-t'ieh* 饕餮 masks, are mostly zoomorphic in form and no doubt partly symbolic of the animistic religion of the time.


37.1
38.6
30.54
39.5


40.3
30.26
39.53
31.10
38.20
30.54


30.54
38.20
30.26
38.6
30.26
40.11
35.12
40.11
39.53
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40.11
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42.14
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42.14
41.9

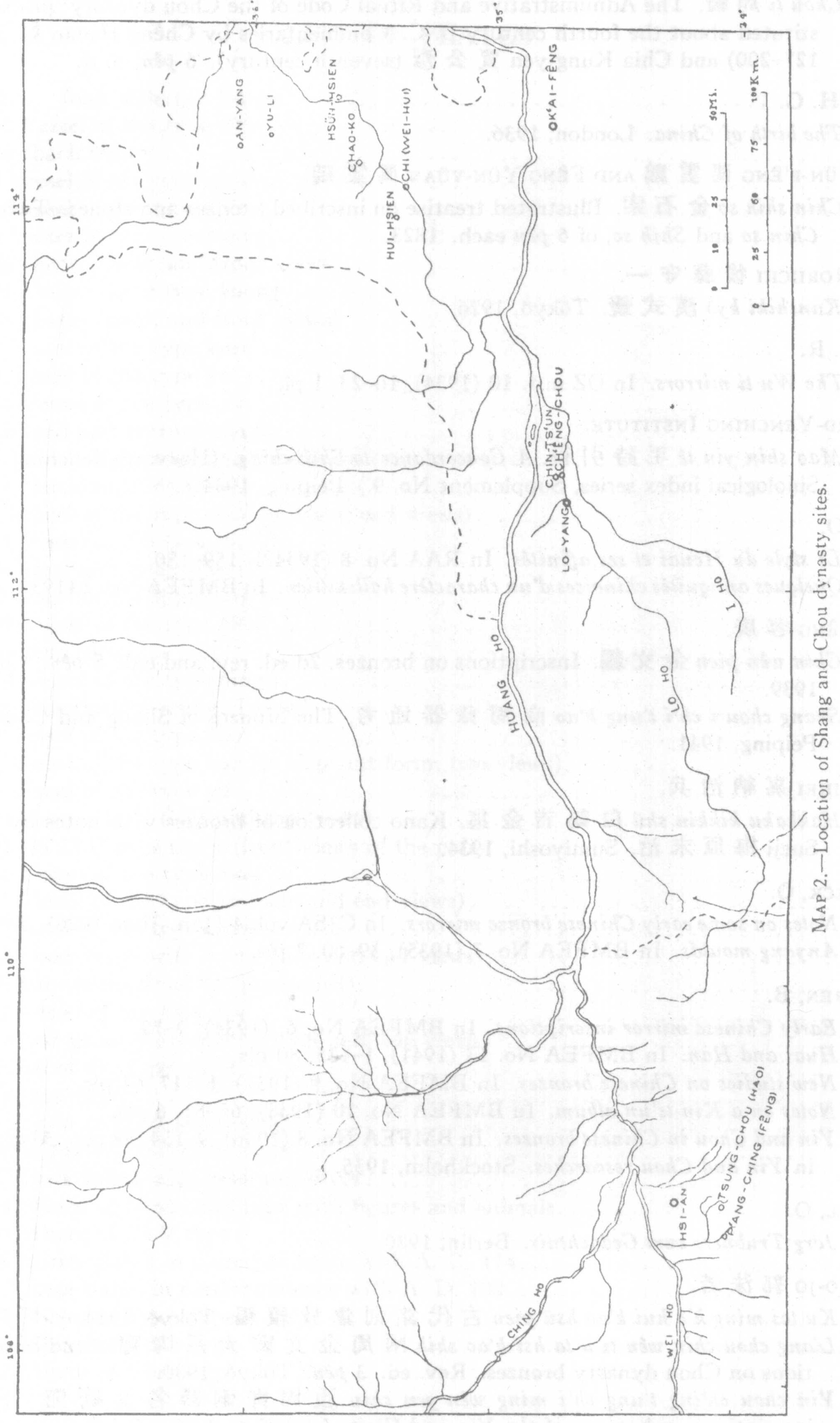
Just what animals, birds, etc., are represented is often a moot point. We seem to find the tiger, water buffalo, elephant, hare, deer, owl, parrot, et al. Also we find fish, the cicada, and perhaps the silkworm. These animal patterns vary from quite natural representations to extremely formal ones, and most are ingeniously contrived to fit the shape of the vessel or the part of the vessel on which they are shown. Usually they have every air of perfect symmetry, but when observed closely, or taken from their context, as in the accompanying drawings, they are often to some extent asymmetrical. Many are composite beasts, and it may well be that the whole theory behind them was at least as complicated as, say, the science of heraldry. Mr. Lodge found them "zoologically beguiling," which indeed they are, and they show well the inherent humor of the Chinese people which survives to this day. Aside from these, there are, of course, the geometrical designs like the so-called thunder pattern, circles, lozenges, and many more, which may have their bearing on the subject to a greater or less degree. Still, we lack the key to this particularly intricate problem.

The line drawings given here are taken from bronzes illustrated in this volume to show just a few basic designs, and in some cases how their concepts overlap. Each drawing bears the number of the vessel from which it was taken.

Studies of the composition of ancient Chinese bronze have been made by a number of scholars, Chinese, Japanese, and Western. Among these, one of the most interesting is that of H. J. Plenderleith (**53**). His findings show that the ancient bronzes analyzed by him are copper-tin alloys containing from 5 percent or less to 30 percent tin and usually from 2 to 3 percent lead, or more. In other words, the copper-tin content has about the same range of composition as our bronzes of today. In addition to this, traces of silver, antimony, magnesium, calcium, and sodium were found in a Shang bronze fragment. Also, specimens of these alloys are harder as the proportion of tin increases and at the same time become more and more silvery in appearance. It may be noted here that in the writer's experience the majority of early Shang-Chou bronzes of the very best quality take on a gray to green patination underlying which will be found a pale gold-colored metal. This does not, however, preclude the possibility of excellent vessels of different composition. For example, the bronze *chia* No. 23.1, has dark green patina over a generally silver-colored bronze, as a filing of the broken foot shows, indicating, perhaps, a greater proportion of tin than that in most of the other early vessels treated here. However, it is also noteworthy that, fine as this vessel is, the quality of casting in the design is not uniform over all as it is in the very best bronzes. However, the series of bronze analyses made up to this time is much too small for any definite conclusions.

From the above remarks it will be seen that this book makes no attempt either to advance or to prove any theories in regard to Chinese bronzes. Rather it is an attempt to tell something of what is at present known about individual pieces. It brings together the greater part of the Chinese bronzes, dating from the Shang dynasty to the fourth century of our era, acquired for the Freer Gallery of Art during the administration of its first Director.

A. G. W.



MAP 2.—Location of Shang and Chou dynasty sites.

CHRONOLOGY

Hsia 夏	?—ca. 1766 B.C.
Shang 商 (also called Yin 殷)	ca. 1766 B.C.—ca. 1122 B.C.
Chou 周	ca. 1122 B.C.— 256 B.C.
Western Chou .... 1122—771	
Eastern Chou .... 771—256	
After 256 the state of Ch'in effectively controlled most of China; its ruler took the title of "Emperor" in 221.	
Ch'in 秦	221 B.C.— 207 B.C.
Former (Western) Han 前 (西) 漢	207 B.C.— A.D. 8
Hsin 新 (interregnum of Wang Mang 王莽 and revolution) A.D.	9— 25
Later (Eastern) Han 後 (東) 漢	25— 220
The Three Kingdoms 三國	220— 265
Wei 魏 .... 220—265 North China	
Shu Han 蜀漢 .... 221—264 Southwest China	
Wu 吳 .... 222—265(280) Southeast China	
Western Chin 西晉	265— 316
Eastern Chin 東晉	317— 420
Six Dynasties 六朝 (includes Wu and Eastern Chin)	220— 589
Sui 隋	589— 618
T'ang 唐	618— 906
The Five Dynasties 五代	906— 960
Northern Sung 北宋	960— 1127
Southern Sung 南宋	1127— 1279
Yüan 元	1260— 1368
Ming 明	1368— 1644
Ch'ing 清	1644— 1912
Republic of China 中華民國	1912— ...

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BGSC —Bulletin of the Geological Survey of China, Peking.
BMFEA—Bulletin of the Museum of Far Eastern Antiquities, Stockholm.
CJSA —The China Journal of Science and Arts, Shanghai.
KHCK —Kuo hsüeh chi k'an (Gwoshyue jikhan) 國學季刊, A Journal of Sinological Studies, Peiping.
OZ —Ostasiatische Zeitschrift, Berlin.
RAA —Revue des Arts Asiatiques, Paris.
SG —Shinagaku 支那學 (Sinology), Kyōto.
SZ —Shigakuzasshi 史學雜誌 (Zeitschrift fur Geschichtswissenschaft), Tōkyō.
TOCS —Transactions of the Oriental Ceramic Society, London.
TP —T'oung Pao, Leiden.
YCHP —Yen ching hsüeh pao 燕京學報, Yenching Journal of Chinese Studies, Peiping.

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32.13	31	35.22	26, 27	40.3	10
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34.4	46	37.14	39	41.4	43
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34.6	47	37.30	38	41.8	9
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34.9	48	38.7	33	42.14	11, 12
34.10	49	38.20	19, 20		

CATALOGUE

Plate 1



35.12

Plate 2

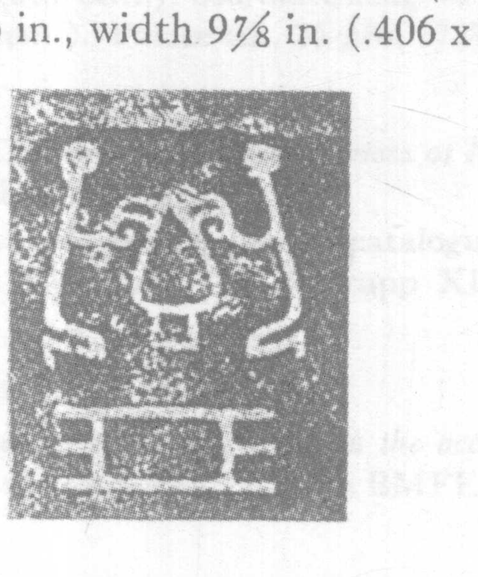


35.12

CATALOGUE

Plates 1 and 2

35.12 Ceremonial vessel of the type *chia*.
Surface of smooth green patina, with decorations in high relief, low relief, and intaglio. Inscription of one character inside bottom. (See cut.)
Shang dynasty. Height 16 in., width 9⅞ in. (.406 x .251 m.) over all.



(A. G. W., J. A. P., 1944.) This character occurs in a number of published bronzes but has not been deciphered. Jung Kêng modernizes it 𠫤 (**40**, vol. 3, p. 27b; pl. 101) but makes no attempt to interpret it. The pictograph itself apparently represents some kind of offering ceremony and may well represent a name, or the official designation of a specific ceremonial functionary.

Plate 3

25.3 Ceremonial vessel of the type *chüeh*.
Surface of a variable apple-green and bluish patina with traces of earthy incrustation. Decoration cast in low relief with strongly projecting flanges.
Shang dynasty. Height 9⅞ in., width 8⅞ in. (.251 x .225 m.) over all.

Plate 4



23.1

Plate 3



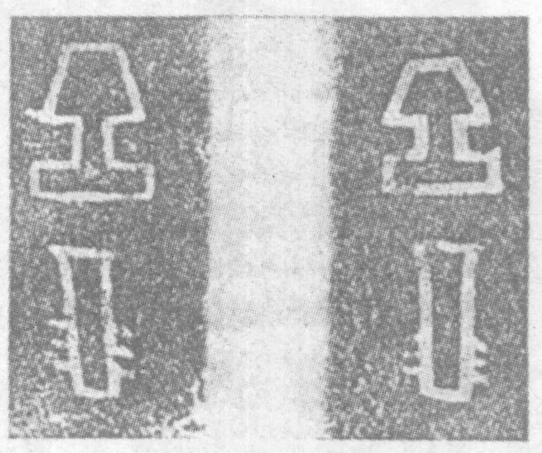
25.3

PLATES 5 AND 6

38.5 Ceremonial vessel of the type *kuang*.

Smooth soft green patina with scattered incrustations outside and in; criss-cross mold impression on bottom. Inscription of two characters inside both vessel and cover. (See cut.)

Shang dynasty. Height 9¼ in., width 12¼ in. (.235 x .310 m.) over all.



(J. E. L., 1938.) The first of the two characters in the inscription represents a building; the second, an axe head. The same characters, but in reverse order, appear in an inscription reproduced by Lo Chên-yü (**41**, ch. 4, p. 34b). He describes them respectively as a *ch'ung wu* 重屋 and a *fu* 斧. The latter term simply means "axe"; but *ch'ung wu*—literally "double house"—is, perhaps, less definite, although the form of the ideograph certainly suggests "two-storied house" as a probable meaning (see, however, **6**, vol. 2, p. 559, ¶29 and note[2]). In any case the *Chou li* (**12**, 冬官, p. 47a; and cf. **6**, loc. cit.) says that the people of Yin built such houses—though whether the statement can have any bearing on the dating of our *kuang* seems at best doubtful.

(A. G. W., 1944.) Jung Kêng gives the same character as Lo Chên-yü, and identifies it with *hêng* 享 (**20**, ch. 5, 30a).

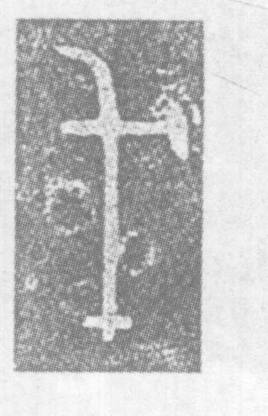
[2] Biot's note states that *ch'ung wu* means a double roof.

PLATE 4

23.1 Ceremonial vessel of the type *chia*.

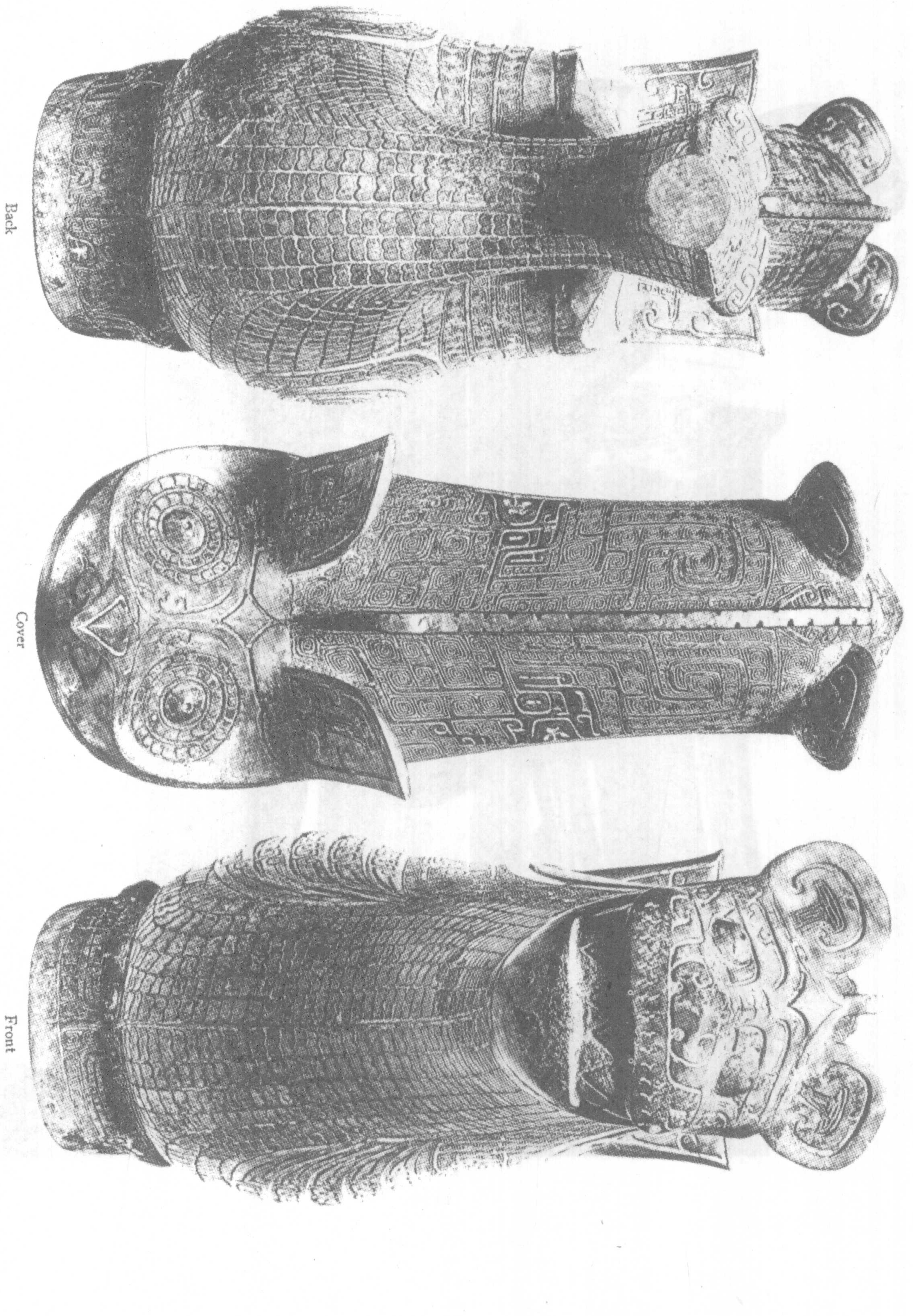
Smooth dark green patina. Tip of one leg broken off. Inscription of one character inside bottom. (See cut.)

Shang dynasty. Height $20\frac{13}{16}$ in., width 12 in. (.528 x .305 m.) over all.



(A. G. W., J. A. P., 1944.) Similar, though not identical, characters are known and identified with the modern *wu* 戊, the fifth of the 10 cyclical stems. Characters of this group appear as names during the Shang dynasty (**63**, ch. 87, pp. 2b–5a).

Plate 6



Back

Cover 38.5

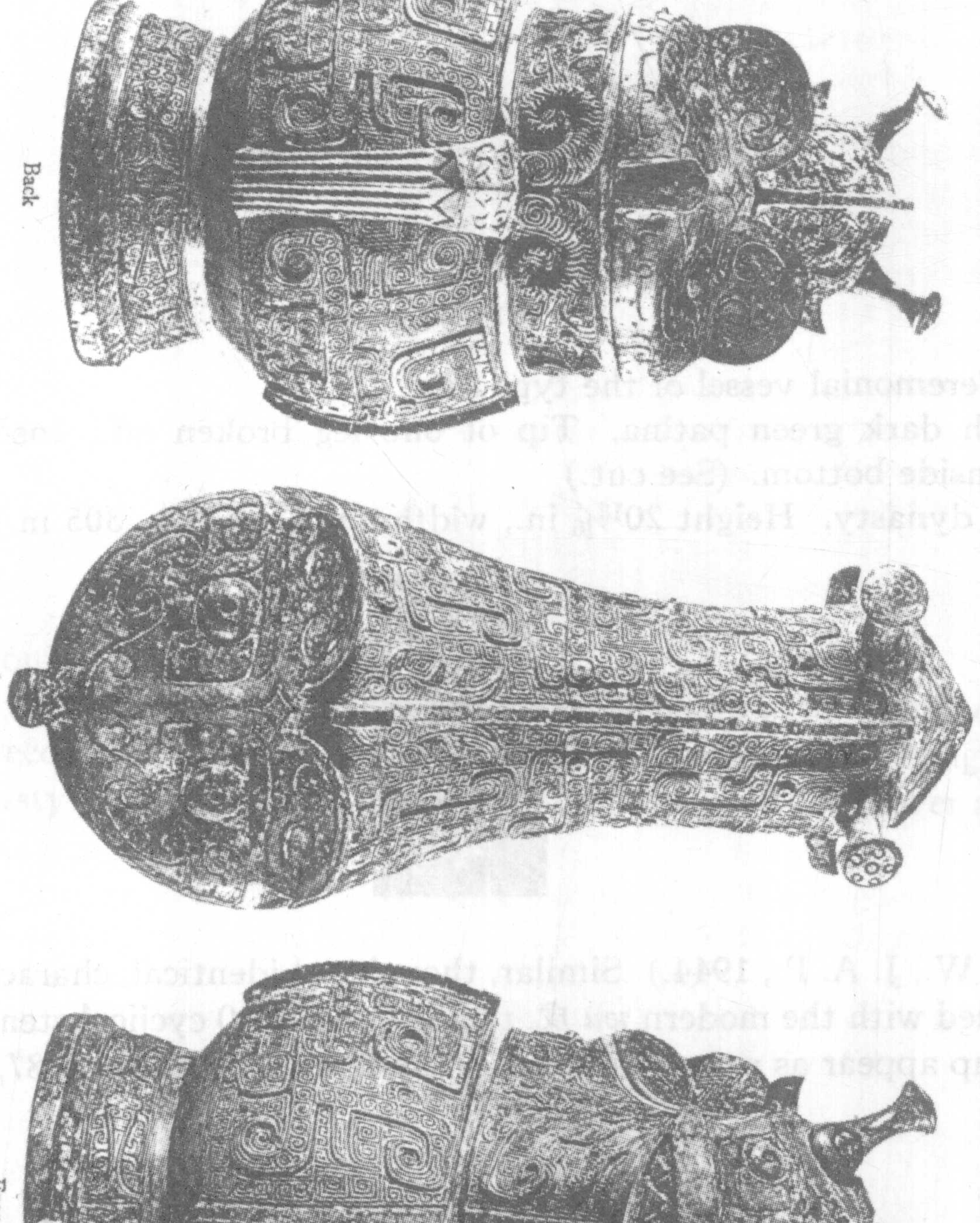
Front

Plate 5



38.5

Plate 8



Back

39.53 Cover

Front

Plate 7



39·53

PLATES 7 AND 8

39.53 Ceremonial vessel of the type *kuang*.

Evenly patinated outside in shades of gray green with flecks of cuprite; inside some azurite with areas of original metal, and a few incrustations.

Shang dynasty. Height 6⅝ in., length 7$\frac{9}{16}$ in. (.167 x .192 m.) over all.

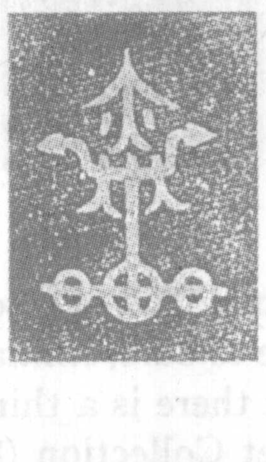
(J. E. L., 1940.) In method and general appearance the decoration is comparable with that of 35.12, of 40.3, and of other bronzes attributable to the late Shang or, perhaps, the Shang-Chou period. The characteristic feature, of course, is the over-all use of the diaper pattern. This *kuang* seems to be exceptional both in delicacy of execution and in the variety of animals used in the decoration. The handle may be compared with an ivory carving published by the Museum of Far Eastern Antiquities (**60**, pl. 3, and p. 99) and said to have been found at An-yang.

PLATE 9

41.8 Ceremonial vessel of the type *kuei*.[3]

Fairly even gray-green patina inside and out; malachite and azurite incrustations on the bottom. Inscription of two characters inside the bottom. (See cut.)

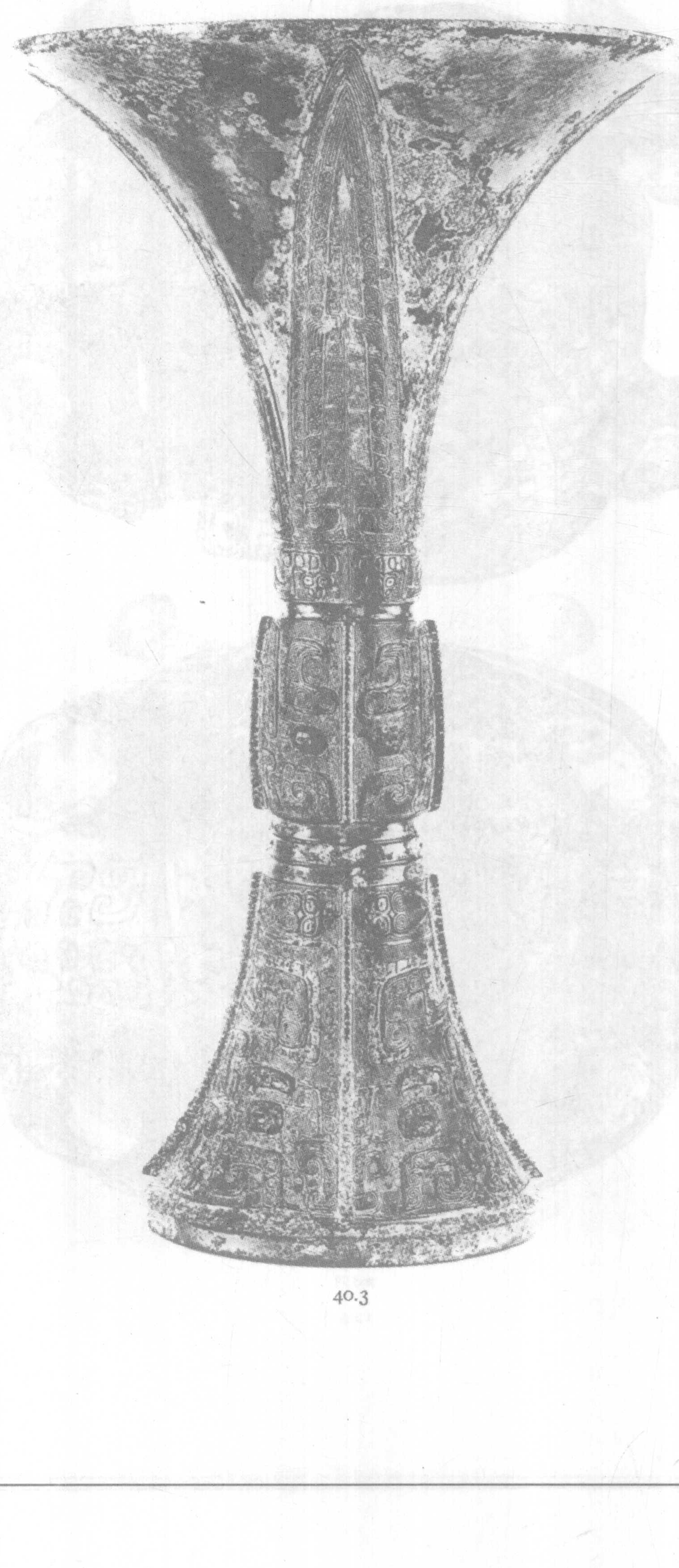
Shang dynasty. Height 5½ in., width 8¼ in. (.139 x .210 m.) over all.



(J. E. L., 1941.) The *kuei* without handles is rather well known, but examples of the *kuei* with handles are far more frequently seen and recorded. This one is unusual both in quality and state of preservation. The beautifully cast inscription reads *i ch'ê* 亦 車, perhaps a name or a monogram.

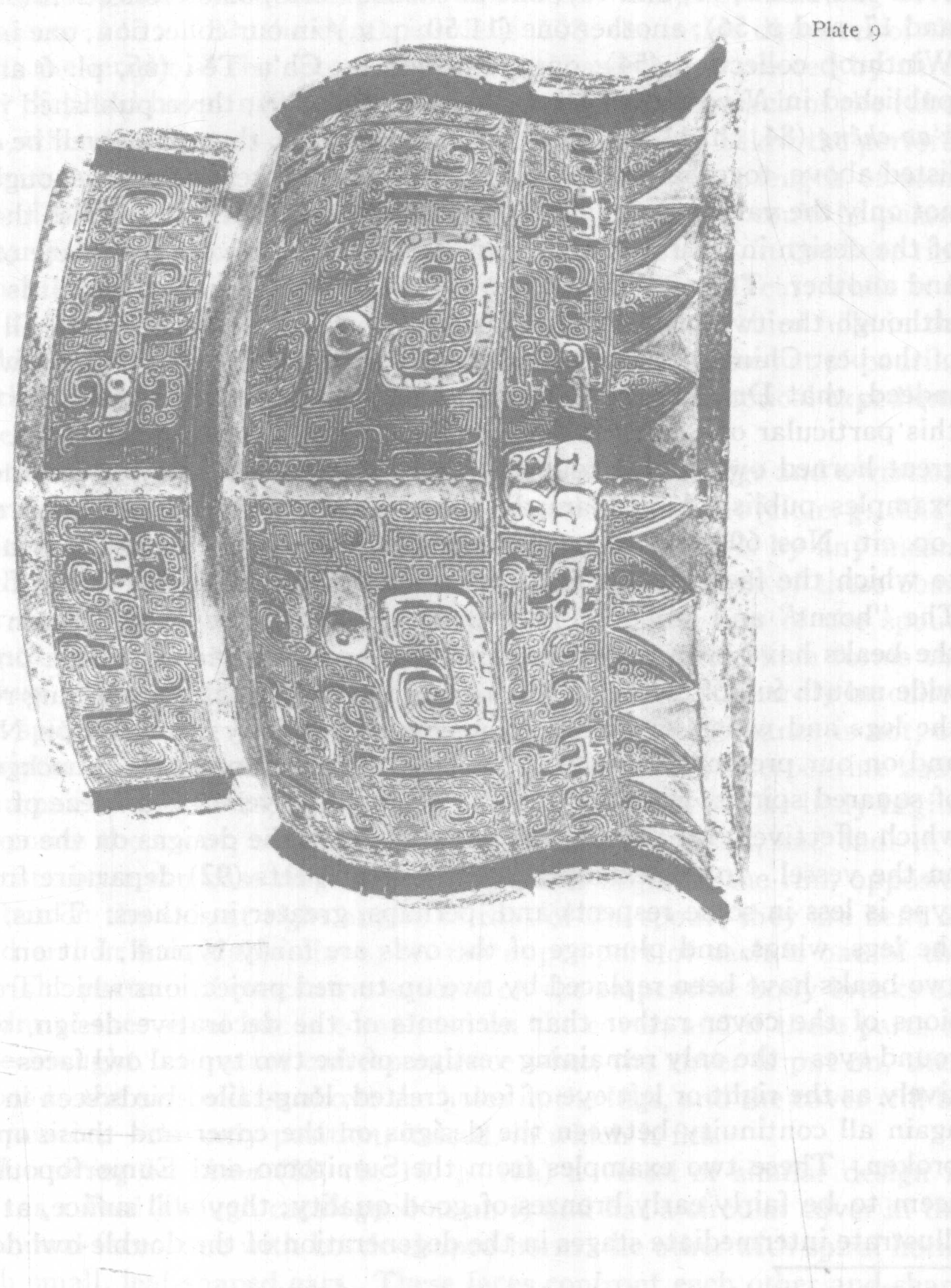
[3] Cf. notes on this type name under 38.20, p. 40.

Plate 10



40.3

Plate 9



41.8

Plate 11



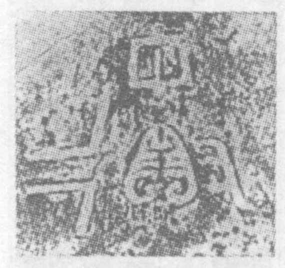
42.14

PLATE 10

40.3 Ceremonial vessel of the type *ku*.

Silvery gray and gray-green patina with scattered incrustations of malachite and cuprite outside and in. Inscription of two characters inside base. (See cut.)

Shang dynasty. Height $11\frac{3}{16}$ in., width $6\frac{3}{16}$ in. (.284 x .156 m.) over all.



(J. E. L., 1941.) This *ku* formed part of a set, of which several other members are still extant. I have seen a mate to ours, similarly inscribed, but not in such good condition; and it would seem that there is a third, illustrated and described in the sale catalogue of the H. K. Burnet Collection (**8**, p. 99 and plate opposite). This latter is very similar to ours in size and decoration, but apparently bears only the second of the two characters with which ours is inscribed. I have seen also two tripod cups of the type *chio* which are decorated in the same style as our *ku* and bear the same inscription.

The well-cast inscription reads Chung-tê 中 得, a name, no doubt, and characteristic in some degree, perhaps, of Shang names, since Chung-jên 中 壬 was the name of a Shang king, and Chung-tsung 中 宗 the temple name of another.

PLATES 11 AND 12

42.14 Ceremonial covered vessel of the type *yu*.

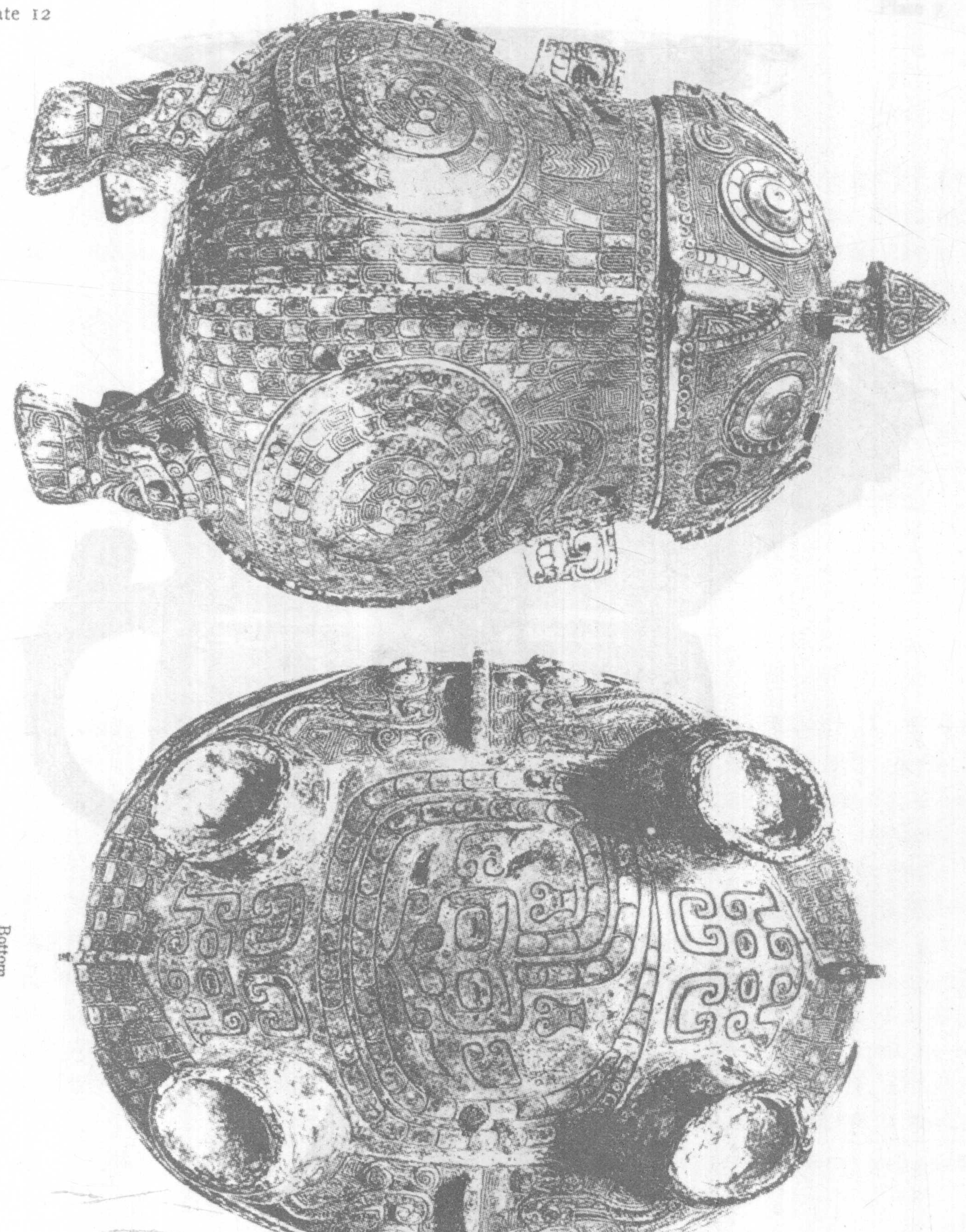
The form is of two horned owls standing back to back. Patination on the outside is gray green with much red (cuprite) in the furrows of the design; inside there is bare metal with incrustations of malachite, cuprite, and azurite.

Shang dynasty. Height $9\frac{7}{16}$ in., width $8\frac{3}{8}$ in. (.240 x .213 m.) over all.

(J. E. L., 1942.) This type of *yu*, while not common, is known in a number of examples. There are, for instance, three in the Sumitomo collection (**61**, pt. 1, Nos. 69a and b, 70, and 71); one in the Eumorfopoulos collection (**92**, pls. 16, a21, and 17, and p. 56); another one (11.50, q. v.)[4] in our collection; one in the Grenville Winthrop collection (**54**); one published by Ch'u Tê-i (**65**, pl. 6 and p. 16); one published in *Ning shou chien ku* (**50**, ch. 7, p. 20); three published in *Po ku t'u lu k'ao chêng* (**84**, ch. 11, pp. 35–39); and, of course, there may well be others. Those listed above, together with the present example, are, however, enough to illustrate, not only the variety among individual vessels of the type, but also the degeneration of the design in course of time and, perhaps, as between one place of manufacture and another. Thus, taking the present example as prototypical, it is apparent that although the two birds standing back to back are executed with all the formality of the best Chinese bronze technique, they are nonetheless clearly owls—so clearly, indeed, that Dr. Alexander Wetmore has not hesitated to identify the species of this particular one as *Bubo bubo*, the eagle owl of Europe and Asia, related to the great horned owl of this country. Similarly realistic are, for instance, two of the examples published by Hamada (**61**, Nos. 70 and 71); but in his third example (op. cit., Nos. 69a and b) degeneration of the design is chiefly apparent in the extent to which the faces of beasts have been substituted for the faces of the two owls. The "horns" and large, round eyes of the owls have, indeed, been retained; but the beaks have been replaced by snouts, and each face has been provided with a wide mouth full of teeth. Of the rest of the owls' anatomy nothing remains except the legs and wings; the body plumage—so carefully indicated on Nos. 70 and 71 and on our present example—is replaced by the conventional background pattern of squared spirals, while around the neck of the vessel is a frieze of small dragons which effectively breaks all continuity between the designs on the cover and those on the vessel. In the example published by Yetts (**92**) departure from the prototype is less in some respects and, perhaps, greater in others. Thus, on the vessel the legs, wings, and plumage of the owls are fairly typical; but on the cover the two beaks have been replaced by two up-turned projections which are really extensions of the cover rather than elements of the decorative design, while the four round eyes—the only remaining vestiges of the two typical owl faces—serve respectively as the right or left eye of four crested, long-tailed birds seen in profile. Here again all continuity between the designs on the cover and those on the vessel is broken. These two examples from the Sumitomo and Eumorfopoulos collections seem to be fairly early bronzes of good quality; they will suffice, at all events, to illustrate intermediate stages in the degeneration of the double-owl design.

[4] This bronze is a late reproduction of an archaic type. A. G. W.

Plate 12



End

42.14

Bottom

The final stage, however, is to be seen in our 11.50 and in four others of the same type: one published by Ch'u Tê-i (loc. cit.), one published in *Ning shou chien ku* (loc. cit.), and the first two of those published in *Po ku t'u lu k'ao chêng* (loc. cit.). From these five bronzes every trace of the owls except the legs and wings is gone. On the covers are monster faces of the so-called *t'ao-t'ieh* type; on the vessels only the four legs and the mere shape of the four wings remain; and apart from these features the surface of the bronze is smooth and undecorated. But however nearly the owls have vanished from the vessels, even the tradition of them seems to have vanished from the consciousness of those who first catalogued these five examples. Yetts (loc. cit.) of course recognizes that such bronzes belong to the double-owl type of *yu*; but the wings on our 11.50 were originally described as "wave designs in relief, ending in bold curling surf"; the example published in *Ning shou chien ku* (loc. cit.) is labeled "*t'ao-t'ieh yu*"—with reference, of course, to the two monster faces on the cover; the two examples published in *Po ku t'u lu k'ao chêng* (loc. cit.) are labeled simply "four-legged *yu*"; and the one published by Ch'u Tê-i (loc. cit.) is described at some length as having "the appearance of a tortoise" and being, indeed, a "tortoise *yu*." In this connection it is a mildly curious coincidence that there is a representation of a tortoise in outline on the bottom of Hamada's No. 70 mentioned above. Apart from our present example, and the one in the Winthrop collection, all these vessels, with one exception, are attributed by their respective cataloguers to the Chou dynasty, the exception being the one published by Ch'u Tê-i which is attributed to the Shang dynasty—why, I cannot imagine. Hamada's No. 70 is, I think, the only one that is inscribed: it has a pictorial form of *ko* 戈 inside both the cover and the vessel. All of them are provided with lugs on the minor axis of the vessel for the attachment of a bail handle. In the case of our present example, the lugs are tubular; but in every other case they have the form of vertical loops, one of which, however, in the case of the example published by Ch'u Tê-i, appears to have been broken off. Out of the entire group, only six still have their bails: Hamada's Nos. 69 and 70, the one in the Winthrop collection, and the three published in *Po ku t'u lu k'ao chêng*. Of these, Hamada's No. 69 has the type of bail that consists essentially of a stout band of bronze, the under surface flat, the upper rounded, with an animal head and a heavy ring at either end; but the other five all have bails that look like plain-laid cord, the one in the Winthrop collection and Hamada's No. 70 being actually made of bronze, while the drawings of those published in *Po ku t'u lu k'ao chêng* certainly suggest bails made of some flexible material such as strands of bamboo or leather. Our present example, at all events, must once have had a flexible bail, since a swinging bail made of a rigid material could hardly have been used in connection with lugs which are tubular (cf. 42.1) and, in addition, are partly overhung by two of the flanges on the cover.

Instances of the double-owl design applied to any type of vessel other than the *yu* seem to be rare: but there is one catalogued as a "Phoenix *i* of the Chou dynasty" in *Hsi ch'ing ku chien* (**38**, ch. 14, p. 26), and an *i* once offered to us by Dr. Otto Burchard, a dealer. This last is said to have been found in An-yang and

is a very interesting example of early date. Similar to it is a square *i* with complete owls back to back on the cover as well as on the vessel (**49**, No. 2); and in the same publication (No. 3) is a long-necked *yu* with both owls complete on the belly of the vessel. No. **61** in the same catalogue is another double-owl *yu* in the possession of Mrs. Doris Duke Cromwell, New Jersey.

Plates 13 and 14

42.1 Ceremonial vessel of the type *huo*.

Cover in the form of a human face with horns. The patination on the outside is gray green with sparse malachite incrustations; inside, gray, gray green, malachite, cuprite, azurite, and calcareous deposit.

Shang or early Chou dynasty. Height 7⅛ in., width 8³⁄₁₆ in. (.181 x .208 m.) over all.

(J. E. L., 1942.) The measurements given above were made with the cover in place and include the horns and the spout. The vessel itself, not including cover or spout, measures .125 x .182; the depth inside is .108; the inside diameter of the mouth is .120; the length of the spout is .055. The base ring is pierced by three symmetrically disposed holes: one below the spout and one below each of the tubular lugs which, when the cover is correctly placed, lie respectively below the perforations in the ears of the mask. Obviously, therefore, a sufficient length of some flexible material—such as twisted or braided strands of bamboo—could be passed through the ear perforations, the lugs, and the two opposite holes in the base ring so as to form a bail by which the vessel could be conveniently held; while it is possible that a shorter length of similar material attached to the third hole in the base ring could have been used as a means of tilting the vessel in the act of pouring the contents through the spout—a mere guess, of course, but a practical expedient, at least, if the vessel were hot.

The *huo* type of ceremonial vessel usually has three or four legs and a vertical loop handle projecting from the side of the vessel opposite the spout (cf., e. g., 33.2). However, neither a legless variety nor one provided with a bail is by any means unknown, although I have never until now seen a *huo* having both of these characteristics, or one with the bail placed at right angles to the axis of the spout. Equally exceptional in my experience is the horned human face which forms the cover of this *huo*. Apart from its bottle-shaped horns, the face can hardly be called monstrous, in spite of its big, staring eyes; but the cast of countenance is not, on the whole, Chinese. This curious head is provided not only with a serpentine body but also with a pair of fore limbs, all shown in relief on the vessel. The body begins at the rim opposite the spout, coils spirally once around the vessel, and ends in a sharp point just above the base ring. The limbs also begin at the rim, opposite one another, but on the axis at right angles to that of the spout; they are bent at the elbow and end in formidable claws; on the upper part of each is one of the tubular lugs. The pattern of concentric squares on the serpentine body breaks off short at the rim of the vessel but is completed on the cover, and if these parts of the design are brought into exact correspondence when the cover is put on, then the perforations in the ears will be above the holes in the lugs, and the cover will be in its correct position—the only position, indeed, in which it fits.

In the *Hsi ch'ing ku chien* (**38**, ch. 14, p. 10a) a vessel of similar design is illustrated. It is a *kuei* (though catalogued as an *i*) and has a circular cover in the form of two animal faces, one with bottle-shaped horns, the other with spiral horns and both with small, leaf-shaped ears. These faces confront each other and share

Plate 13



Cover



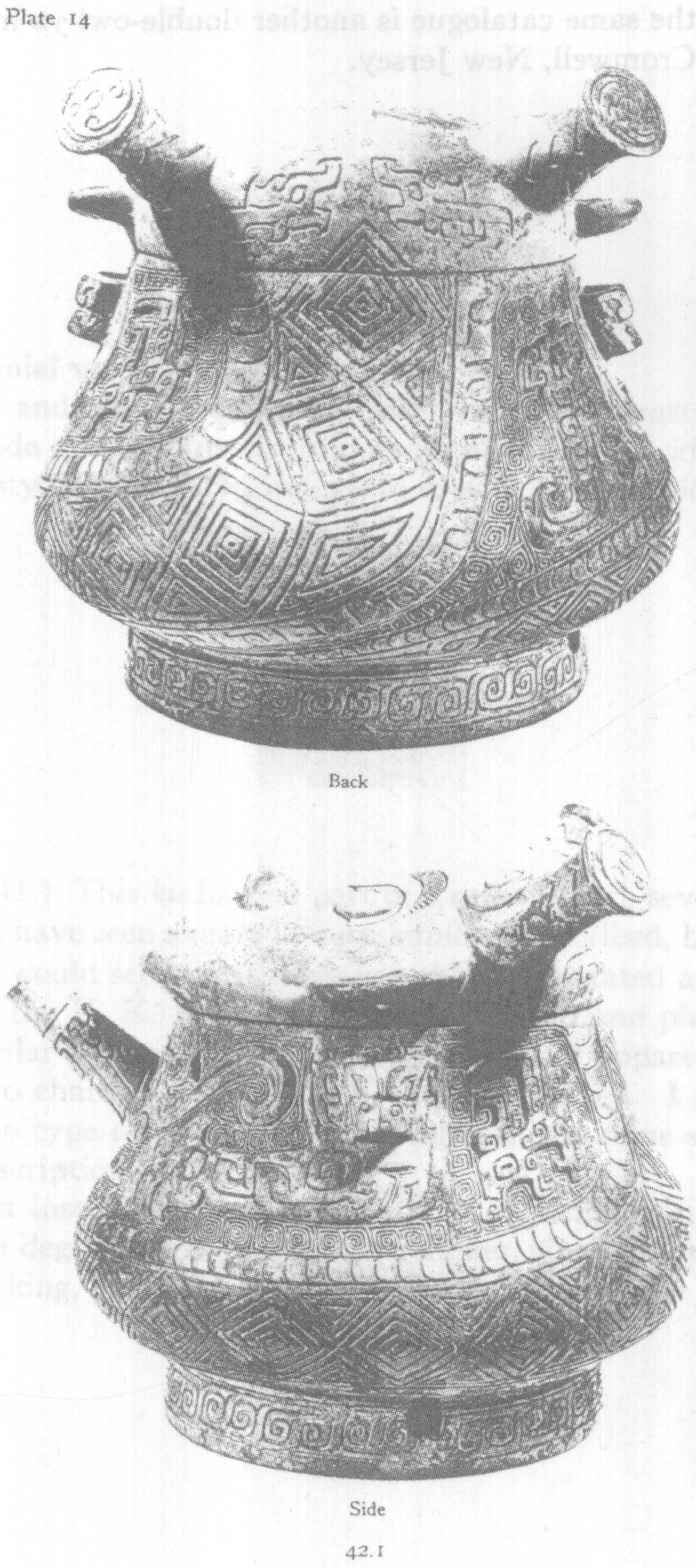
Front

42.1

a common mouth which extends across the middle of the cover. On the vessel—which closely resembles the vessel of our *huo* in shape—a serpentine body belonging to one of the faces is disposed in much the same way as on our *huo*. I assume, however, that the other face is also provided with a similar body, so that what the illustration shows is the beginning of one body turning off to the left, and the latter part of the other body coiling around the vessel from the right. On both bodies is a pattern of concentric squares which does not appear, however, to be carried over onto the cover.

This *huo* is strongly designed and well executed, but lacks, I think, the refinement which characterizes Shang bronzes of the best quality. It seems to be, however, a provincial rather than a metropolitan thing, and although I have dated it early Chou, I see much about it to suggest an earlier date.

(A. G. W., 1944.) One of the striking features of this bronze is the presence in the design of the arms and three-fingered claws of the creature represented by the vessel as a whole. Arms and claws of this type occur not only on the so-called *ju hu yu* 乳虎卣 in the Sumitomo and Cernuschi collections (**61**, pt. 1, pl. 68; **5**, pl. 5, opposite p. 32), and the drum in the former collection (op. cit., pl. 130), but also on a white pottery *lei* from An-yang (**73**, pp. 545–588; and **71**, pls. 9–16). Jung Kêng classifies the Sumitomo *ju hu yu*, which he calls a *t'ao t'ieh shih jên yu* 饕餮食人卣, as of the Shang dynasty, and the drum as Shang or early Western Chou (**21**, vol. 1, pp. 419 and 512). The presence of this curious design on Shang pottery certainly seems to establish plausible connection between that dynasty and all the above-mentioned bronzes, since there appears to be no reason why other elements of the designs should not have been executed at an early period.



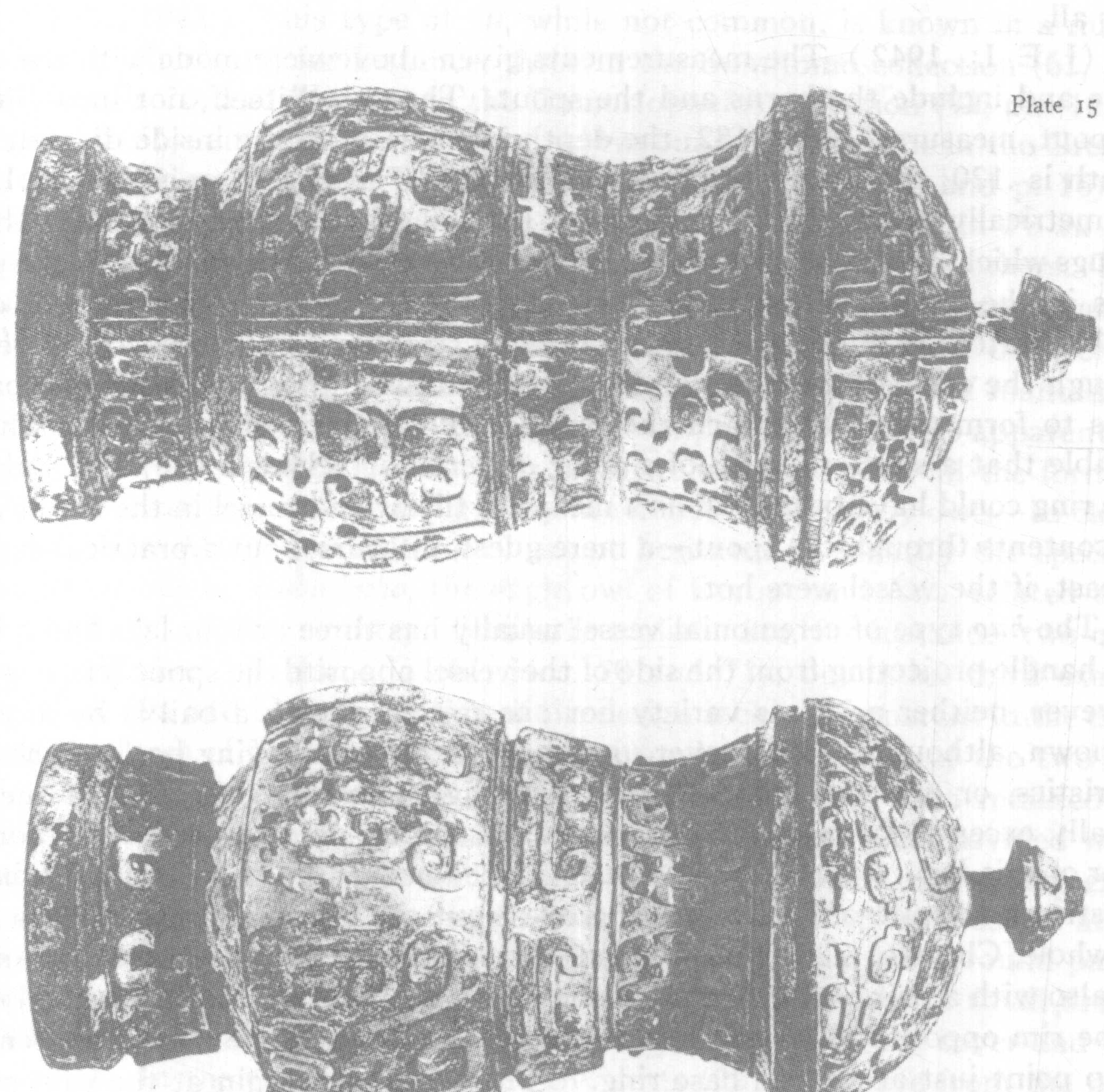
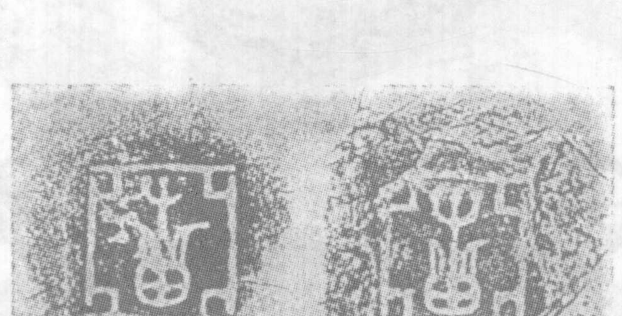


PLATE 15

38.6 Ceremonial vessel of the type *chih*.

Surface of smooth silvery green patina with patches of rough green; earthy adhesions. Decoration in low relief, except for incised lines on knob. Inscription in vessel and cover. (See cut.)

Chou dynasty. Height 7½ in., width 3½ in. (.190 x .089 m.) over all.



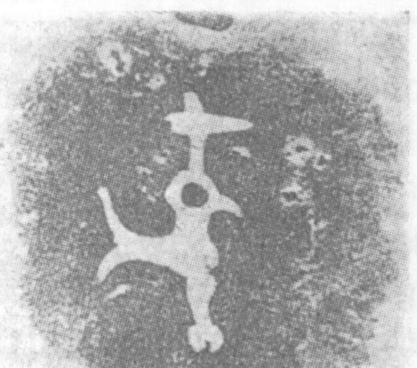
(A. G. W., J. A. P., 1944.) This inscription is published as occurring in a *li* and a *tsun* (**45**, ch. 5, 13a; ch. 11, 3b). The character within the *ya hsing* 亞形 is given by Takata Tadahiro as an early variant form of the character *pang* 邦 (**63**, ch. 20, p. 7b). However, most present-day Chinese authorities leave it uninterpreted. It is used here, no doubt, as a name. Another vessel very much like this is in the Kano collection. It bears the inscription *i fu* 乙父 (**22**, No. 19).

PLATES 16 AND 17

40.11 Ceremonial covered vessel of the type *yu*.

Outside, fairly even patination in shades of gray green with flecks of cuprite; inside, cuprite, azurite, and malachite with areas of original metal; little incrustation. Inscription of one character inside both cover and vessel. (See cut.)

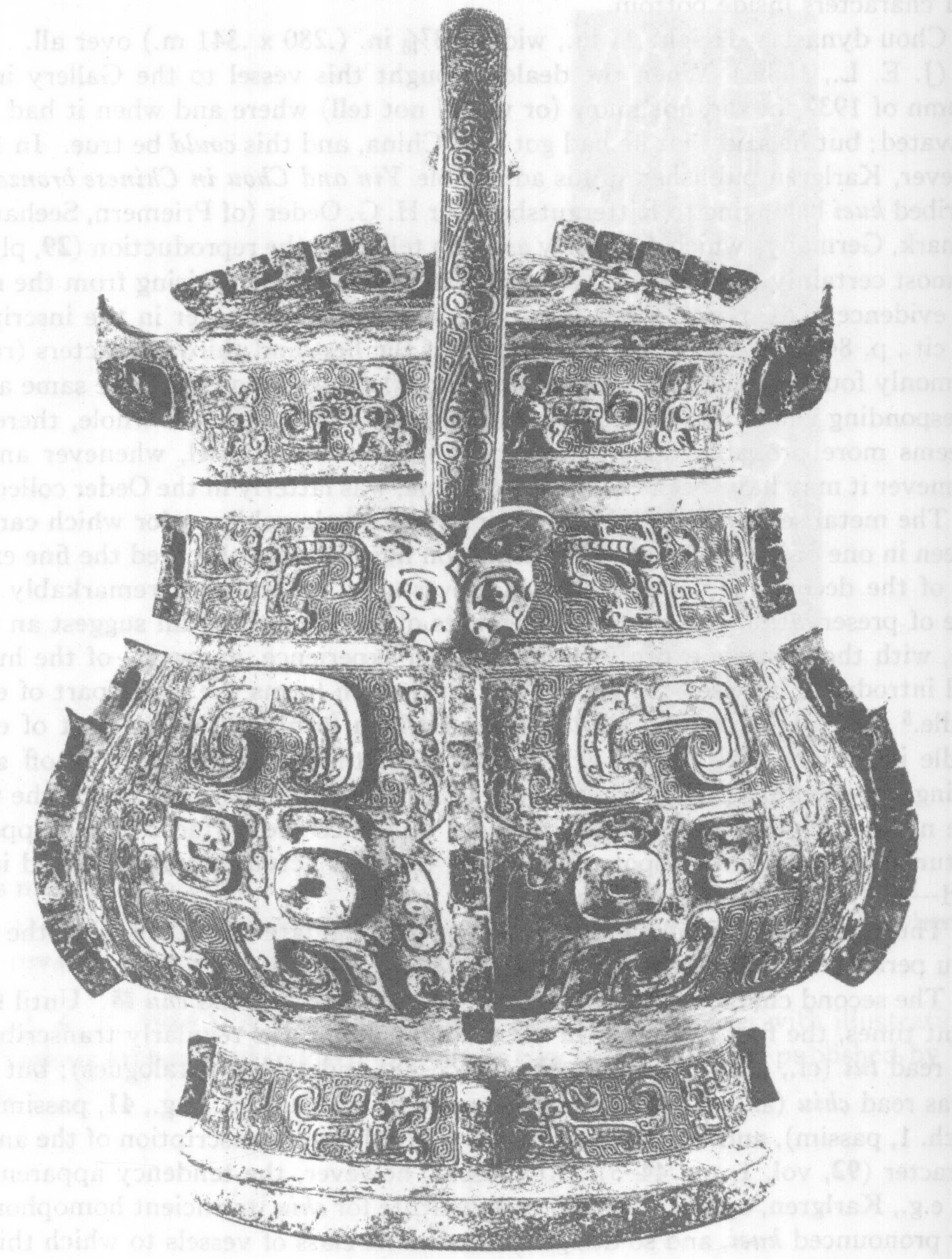
Shang dynasty. Height 14 3/16 in., width 10½ in. (.361 x .267 m.) over all.



(J. E. L., 1941.) The inscription appears both in the bottom of the vessel and in the cover. I know of at least one other bronze inscribed with this character: it is a *fang i* of which photographs were sent to me by Karlbeck. This *i* is, however, very different in style from our *yu*, and its inscribed bird faces to the left instead of to the right. Of the two, Karlbeck's may be the earlier; but both, I think, belong to the late Shang or early Chou period. A comparable *yu* has been published by Yetts (**91**, No. 3, pls. 3 and 4).

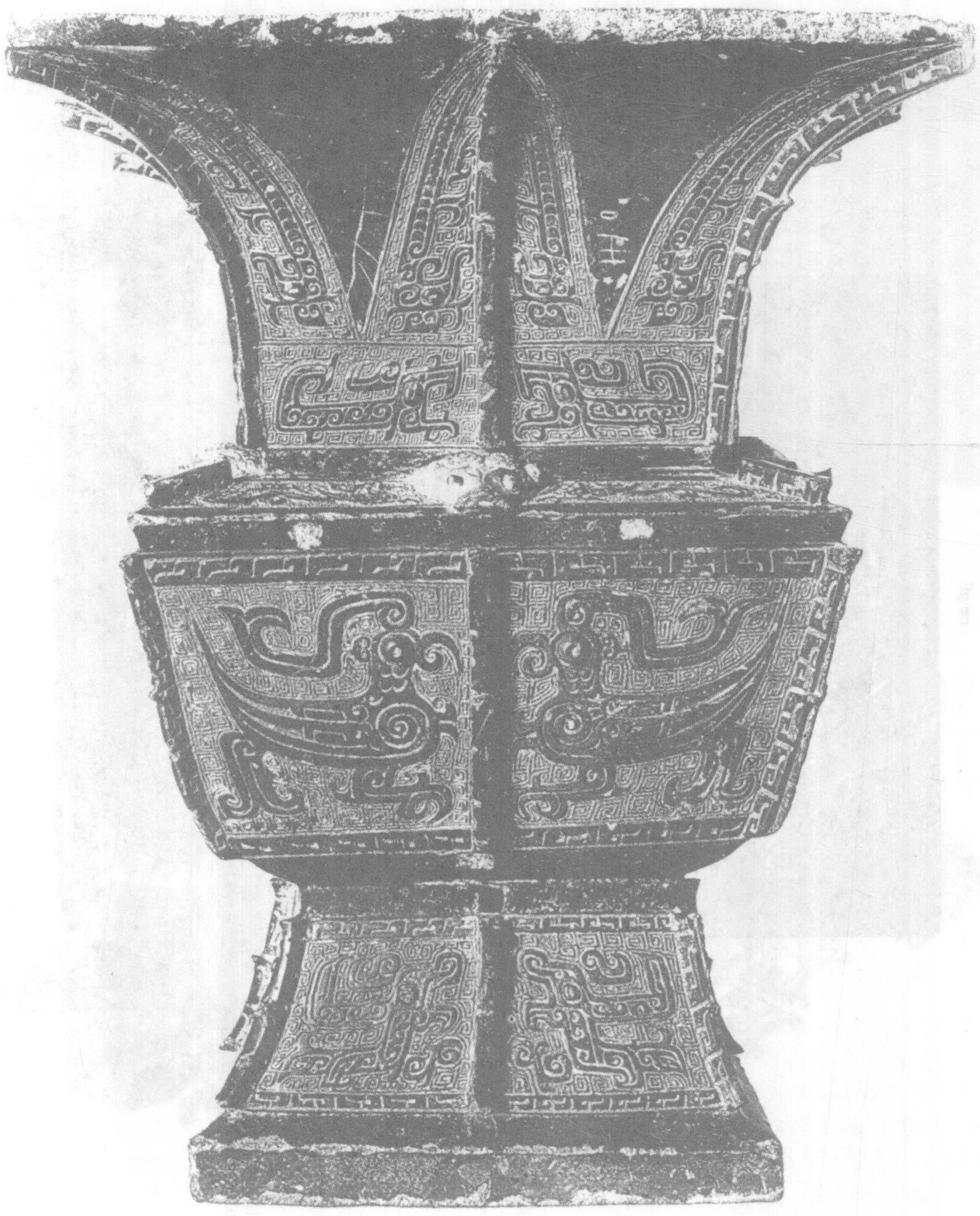
(A. G. W., J. A. P., 1944.) Two published inscriptions show characters similar to, though not identical with, this (**45**, ch. 14, p. 32b; **20**, suppl. A, p. 21a-b). No interpretation has been offered, but it may be noted that the character is clearly composed of the *niao* 鳥 and *ko* 戈 elements that constitute *yüan* 鳶 in modern script. Literary evidence points to a certain degree of antiquity for *yüan*; it occurs twice in the *Shih ching* (**17**, p. 56, 2/30222; **35**, vol. 4, pt. 2, pp. 358, 445).

Plate 16



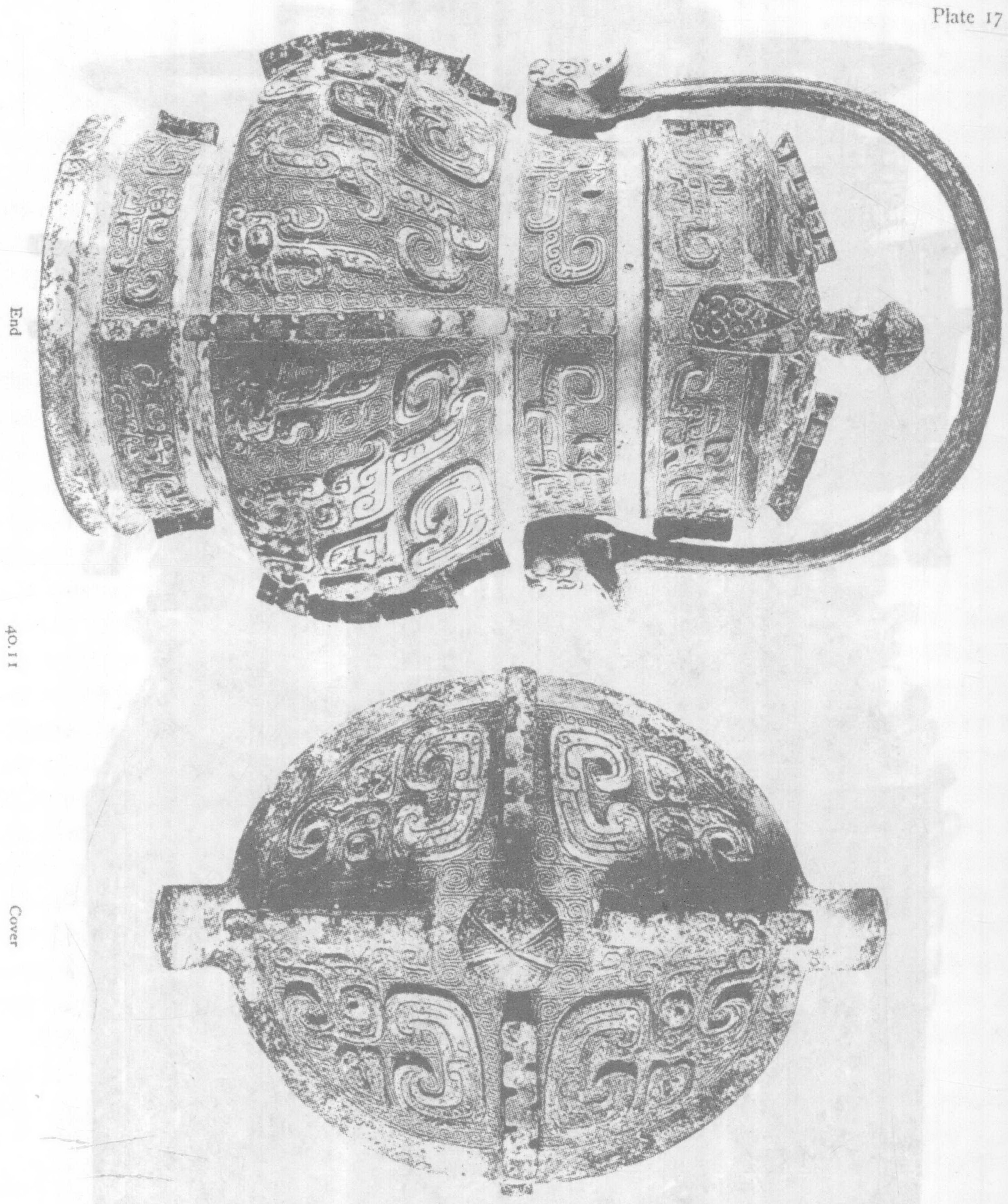
40.11

Plate 18



25.2

Plate 17



End

40.11

Cover

（前有白頁1）

Plates 19 and 20

38.20 Ceremonial vessel of the type *kuei*.

Thin, scattered malachite and cuprite patination inside and out. Inscription of 11 characters inside bottom.

Chou dynasty. Height 11 in., width $13\frac{7}{16}$ in. (.280 x .341 m.) over all.

(J. E. L., 1939.) When the dealer brought this vessel to the Gallery in the autumn of 1937, he did not know (or would not tell) where and when it had been excavated; but he said that he had got it in China, and this *could* be true. In 1935, however, Karlgren published in his admirable *Yin and Chou in Chinese bronzes*, an inscribed *kuei* belonging to Rittergutsbesitzer H. G. Oeder (of Priemern, Seehausen, Altmark, Germany) which, as nearly as I can tell from the reproduction (**29**, pl. 12), is almost certainly this one—my only serious doubt, indeed, arising from the negative evidence of Karlgren's failure to read the second character in the inscription (op. cit., p. 84, E40), although his reading of the first and third characters (rather commonly found, however, in these dedications) shows them to be the same as the corresponding characters in the inscription given below. On the whole, therefore, it seems more probable than merely possible that this vessel, whenever and by whomever it may have been taken out of China, was latterly in the Oeder collection.

The metal seems to have been originally of a pale golden color which can still be seen in one or two small areas. Patination has nowhere obscured the fine execution of the decorative designs: the whole vessel is, indeed, in a remarkably good state of preservation. The various elements of the decoration all suggest an early date, with the possible exception—in my own experience, anyway—of the human head introduced between the legs of the bird which forms the lower part of either handle.[5] The mouth of the fabulous beast which forms the upper part of either handle is provided with tusks which look as if they had been broken off short, leaving mere stumps projecting, more or less, beyond the lips. No doubt the tusks were not designed to look as they now do; but since the surfaces of the apparent fractures are confluent in spots, it must be that the actual breaks occurred in the mold—not in the finished bronze.

The great elegance of the inscription suggests a date near the end of the early Chou period. The text is shown on the following page.

The second character in the first column may also be read *chu* 諸. Until fairly recent times, the first character in the second column was regularly transcribed 敦 and read *tui* (cf., e.g., **68**, vol. 2; **38**, ch. 27–28; and earlier catalogues); but later it was read *chiu* (as below) by many competent scholars (cf., e.g., **41**, passim; and **33**, ch. 1, passim), and this seems, indeed, to be a better transcription of the ancient character (**92**, vol. 1, pp. 44–5). At present, however, the tendency apparently is (cf., e.g., Karlgren, op. cit., passim) to substitute for *chiu* its ancient homophone 簋, now pronounced *kuei*, and so designate the whole class of vessels to which this one belongs. The last five characters in the second column constitute a phrase which appears also in other bronze inscriptions. Lo Chên-yü (**41**, ch. 6, p. 12a-b) reads them 用卿王逆徣; but Kuo Mo-jo (**33**, vol. 1, p. 49) reads 用卿(饗)王逆造, and

[5] See, however, 42.1.

Plate 18

25.2 Ceremonial wine vessel of the type *fang tsun*.

Surface of smooth dark green patina, with two areas of light green, and a scattering aerugo of malachite green; traces of earthy incrustation. Decoration in low and high relief.

Chou dynasty. Height $13\frac{15}{16}$ in., width 11 in. (.353 x .279 m.) over all.

(A. G. W., 1944.) Jung Kêng classifies this vessel as one of four Shang dynasty bronzes of the type *tsun* (**21**, vol. 1, p. 399; vol. 2, p. 289, fig. 552). The attribution is apparently based on the elements of the design, but the quality and treatment of the vessel as a whole strongly suggest a later date.

Plate 20



38.20
End

Plate 19



38.20

says further (loc. cit., p. 77), ". . . . *ni tsao* 逆造 means *ying sung* 迎送 to welcome and see off . . . . Speaking as one receiving the king, the expression *ni tsao* (to welcome and see off) is used." In my reading and translation of this inscription I have followed Kuo Mo-jo.

伯者父作寶
毀用卿王逆造



This may be translated:

"Po Chê-fu made this precious *chiu* to be used for offerings when royalty is formally received."

(J. A. P., 1944.) A brief discussion of the type name *kuei* with illustrations of the various archaic and modern characters concerned has been published by Yetts (89).

Plates 21 and 22

30.54 Ceremonial covered vessel of the type *fang i*.

White bronze patinated with azurite (chiefly inside), malachite, and cuprite. Inscriptions inside cover and inside bottom.

Chou dynasty. Height 13⅞ in., width 9$^{11}/_{16}$ in. (.351 x .246 m.) over all.

(J. E. L., 1930.) The uppermost element of one of the corner flanges on the vessel is broken off and missing, and three or four elements of the flanges on the knob surmounting the cover are similarly missing. These small fractures are obviously ancient and detract little if any from the surprisingly fine condition of the object as a whole.

The malachite patina on the outside is generally smooth—even glossy in spots. To a considerable extent, however, the cuprite remains and has a rougher surface. There are a few small patches, also, of uncorroded metal. The patination on the bottom is moderately rough and shows small areas of azurite. Inside, the patina is less smooth and less continuous than outside. The surface of the bottom is largely uncorroded and shows one of the inscriptions to great advantage. Above this, the patination is of malachite and cuprite, while the cover is lined, for the most part, with azurite from which a partial coating of malachite would seem to have been removed in order, perhaps, to reveal the underlying inscription more clearly. Apparently the formation of the cuprite, azurite, and malachite occurred in that sequence.

The type *fang i*, or square *i*, though not particularly common, is well known; but in size, outline, and technical perfection this example is distinctly unusual. The architectural character of the form is due chiefly to the shape of the cover with its cupolalike knob. The so-called *t'ao-t'ieh* masks are executed in four—possibly five—planes of relief, and it should be observed that the masks on the cover and knob are upside down in relation to those on the vessel. The two-bodied dragon which appears just below the lip is rather uncommon, although the collection contains two other examples (see 09.260 and 09.261) on bronzes which I believe to be much later and of inferior quality. On each of the four sides, the foot or base flange is perforated in the middle by two square holes—one above the other—and on the bottom of the vessel, each in a fixed relationship to each pair of holes, are four sockets, indicating, possibly, that this *i* was originally provided with a separable bronze base.

(A. G. W., 1944.) In addition to the above description Mr. Lodge had made a lengthy tentative discussion and translation of the inscription but did not have the opportunity of revising and completing it in the light of more recent studies and discoveries.

The inscriptions are inside, as usual, in the cover and bottom. The characters are vigorously written and admirably preserved. Those in the cover, numbering 187, are written in 14 vertical lines; those in the bottom, numbering 188, are written in 14 vertical lines and one horizontal line of 3 characters only.

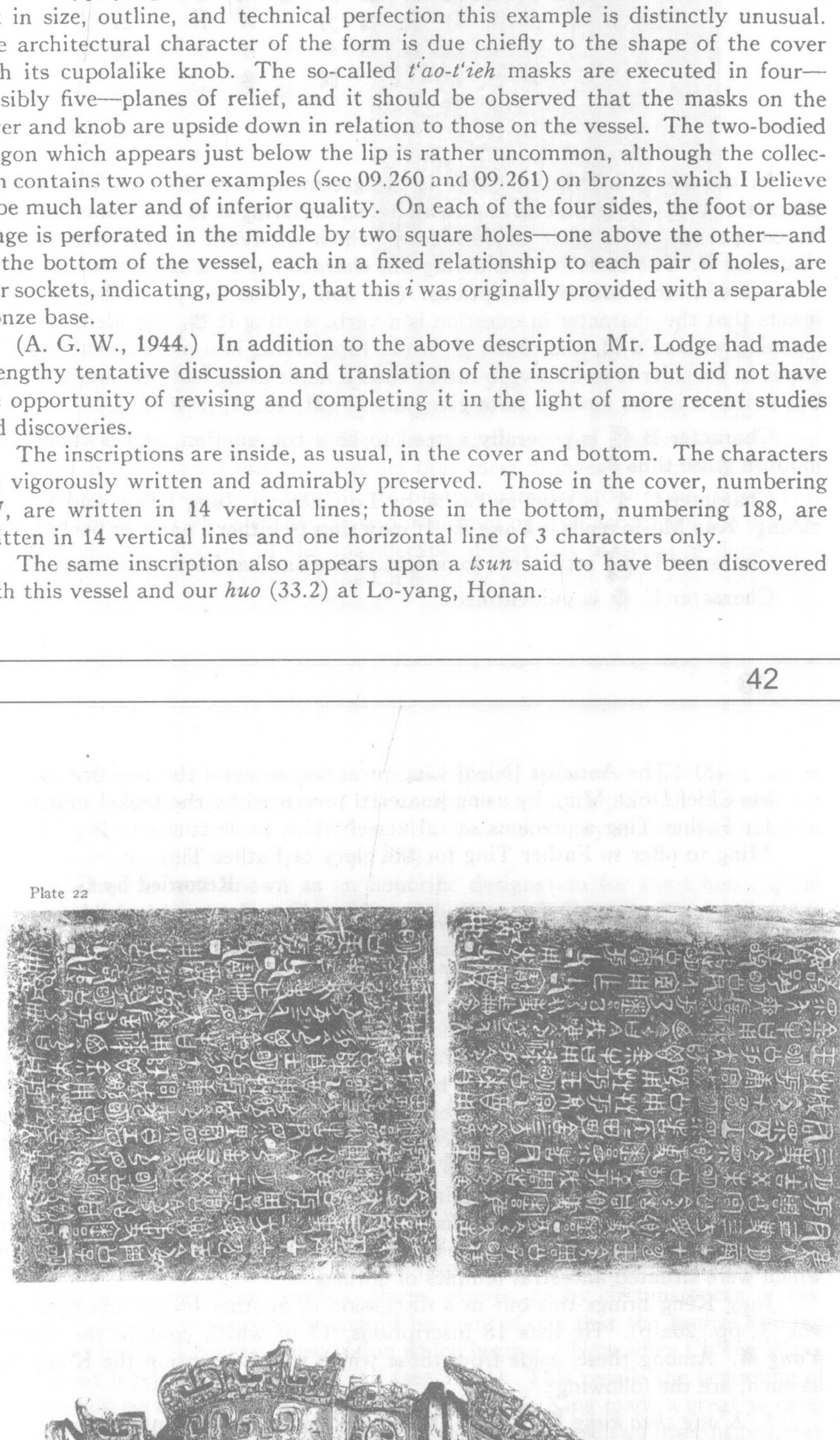
The same inscription also appears upon a *tsun* said to have been discovered with this vessel and our *huo* (33.2) at Lo-yang, Honan.

Plate 21



30.54

Plate 22



Upper, cover. Inscriptions. Lower, vessel 30.54 End

Studies of this inscription have been published by such eminent Chinese scholars as Lo Chên-yü (**44**), Wu Ch'i-ch'ang (**88**), Jung Kêng (**40**, vol. 3, pp. 34–38; **21**, vol. 1, p. 409), Kuo Mo-jo (**32**, vol. 1, pp. 5b–10a), Yü Shêng-wu (**94**), T'ang Lan (**64**), and Ma Hsü-lun (**47**). All these studies, with the exception of the two of a later date by Jung Kêng, have been cited by Bernard Karlgren in his excellent work on Yin and Chou bronzes (**29**).

While the general sense of the inscription is clear, there are certain characters in it which either have not been deciphered, or for which no modern counterpart seems to exist. Therefore, in the following transcription such characters are represented by Roman letters.

唯八月辰在甲申王令周公子明保
尹三事四方受卿事寮丁亥令夨告
于周公宮公令A同卿事寮唯十
月月吉癸未明公朝至于成周A令舍
三事令B卿事寮B諸尹B里
君B百工B諸侯侯田男舍四方令既
咸令甲申明公用牲于京宮乙酉用
牲于康宮咸既用牲于王明公歸自
王明公錫C師鬯金小牛曰用D錫令鬯
金小牛曰用D迺令曰今我唯令女二人C
B夨E左右于乃寮以乃友事作册令
敢揚明公尹人F用作父丁寶尊
彝敢追明公賞于父丁用光父丁
G册

In the above inscription there is disagreement over the significance of the character A 㣈. Wu Ch'i-ch'ang et al. agree, declaring it to be a name and giving its component parts their modern form which produces a nonexistent modern character 徣. The basis for considering this character to be a name is its appearance as a name in other bronze inscriptions. (See 33.2.) Kuo Mo-jo, on the other hand, insists that the character in question is a verb, writing it 𢓊, and identifying it in meaning with *ch'u* 出, and *ch'ien* 遣, while Jung Kêng, in a more recent work now seems to consider it to be a verb rather than a name as he had previously thought, but writes it in the modern form given above (**21**, vol. 1, p. 409).

Character B 眔 is generally agreed to be a conjunction, and is composed in modern guise thus 眔.

Character C 大 is read as *t'ai* 太 by Lo Chên-yü, Jung Kêng, and Wu Ch'i-ch'ang. Kuo Mo-jo reads it *k'ang* 亢. It may thus be either a name or part of a title.

Character D 禘 represents some sort of rite and has been modernized thus 禘.

Character E 𠂤 is unidentified.

Character F 宮 is modernized as 宮 and identified in meaning with *hsiu* 休.

Character G 𢍰 is the name of the recorder and has not been surely identified, but suggestions such as 雋 and 轟 have been made. The only difference in text between the inscriptions as they appear on the *tsun*, and in the cover and bottom of the *fang i*, is in the horizontal line of the bottom inscription of the latter, which, while corresponding with the last line of the cover inscription, repeats the character *ts'ê*; perhaps with a view to symmetry.

The character *ling* 令 appears 10 times in the inscription. In at least eight of these it is used with the meaning *ming* 命 which is common practice. In the other two it is surely used to refer to the Annalist Nieh Ling 夨令, and could also be that in one other case. The following translation with the above uncertainties in mind is divided into numbered sections giving variant translations:

(1) "Now in the 8th moon, on the day *chia shên*, the King commanded Ming Pao, son of the Duke of Chou, to take charge of the Three Ministries and the Four Directions [i. e., departments having to do with internal and external affairs], and to receive the Chief Ministers."

(2) "On the day *ting hai*, he commanded Nieh [the name of an Annalist] to report in the Palace of the Dukes of Chou."

or: ". . . the Palace of the Duke of Chou."

(3) "The Duke [i. e., Ming Pao] commanded A to assemble the Chief Ministers."

or: "The Duke [i. e., the Duke of Chou] commanded him [i. e., Ming Pao] to go and assemble . . ."

(4) "Now in the 10th moon, in the first quarter, on the day *kuei wei*, Duke Ming went to audience at Ch'êng-chou."

(5) "A and [Nieh] Ling gave out the commands of the Three Ministries concerning the Chief Ministers, all the Directors, the Prefects, and all the officers,"

or: "He sent orders to give out the commands . . ."

or: "He [i. e., Duke Ming] sent [Nieh] Ling to give out the commands . . ."

(6) "and concerning the hereditary nobility, the Marquises, Lords, and Barons, to give out the commands of the Four Directions."

or: ". . . they gave out . . ."

"All commands having been carried out, on the day *chia shên*, Duke Ming sacrificed a victim in the Ching Palace, and, on the day *i yu*, sacrificed a victim in the K'ang Palace. All this accomplished, he sacrificed a victim to the King. Then Duke Ming returned from the King."

(7) "Duke Ming bestowed sacrificial wine, metal, and a small ox on C Shih, saying: 'Perform D' [a rite of some sort]; he bestowed sacrificial wine, metal, and a small ox on [Nieh] Ling, saying: 'Perform D' [the same rite]. Then he gave orders saying: 'Now I command you two men C [Shih] and Nieh [Ling] E to be on the left and on the right, to be colleagues, and also to serve with loyalty.' "

(8) "The Annalist [Nieh] Ling presumes to extol the beneficence of his Chief Duke Ming by using [material presented by the Duke] to make for Father Ting a precious sacral vessel which he ventures to beg Duke Ming to offer to Father Ting for the glory of Father Ting.

Recorded by G."

In the above translation the two renderings of paragraph (2) merely involve the question of translating the phrase 周公宮 which might be taken either as *chou kung-kung*, "Palace of the Dukes of Chou," or as *chou-kung kung*, "Palace of the Duke of Chou." In the latter case it might refer to a particular duke of the line such as Tan 旦 the Duke of Chou who handled the government during the minority of Ch'êng Wang 成王. The former translation, however, which has the more general meaning of ducal palace is perhaps best as being suitable under any circumstance. There is also the question of the rendering of the character *kung* 宮 in its usual meaning "palace." The character occurs twice more in paragraph (6) in the names *k'ang kung* 康宮 and *ching kung* 京宮. In at least these two latter cases the context refers to the performance of certain rites in these places, and so some Chinese authorities tend to interpret the character as *miao* 廟, "shrine." While this may be true, it seems more likely that the reference is to palaces or their precincts, within which were situated ancestral temples or shrines.

Jung Kêng brings this out in a discussion of another bronze inscription (**40**, vol. 3, pp. 20a-b). He lists 18 inscriptions, 13 of which contain the character *k'ang* 康. Among these, aside from those which simply mention the K'ang Kung as such, are the following:

1. *K'ang shao kung* 康邵宮: "The Shao Palace in the K'ang [Palace]."
2. *K'ang mu kung* 康穆宮: "The Mu Palace in the K'ang [Palace]."
3. *K'ang kung ta chih* 康宮大室: "The great room in the K'ang Palace."
4. *Wang tsai k'ang kung hsin kung* 王在康宮新宮: "The king was in the New Palace of the K'ang Palace."
5. *Wang tsai chou k'ang kung tan wang ko mu ta chih* 王在周康宮旦王各穆大室: "When the king was in the Chou K'ang Palace at dawn he went to the Great Room of [King] Mu."
6. *K'ang ch'in* 康寢: "The shrine of K'ang."
7. *K'ang miao* 康廟: "The shrine of K'ang."

From these, it seems that the K'ang Kung was a large palace compound in which, or in the precincts of which, were located the ancestral shrines to former sovereigns. It is important here to mention the inscription in the *kuei* owned by Maj. Gen. Sir Neill Malcolm which mentions Marquis K'ang, a brother of Wu Wang 武王, the first king of the Chou dynasty, to whom an ancestral shrine might well have been built. This vessel is ascribed to the reign of Ch'êng Wang by W. P. Yetts (**90**), and to that of Wu Wang by Jung Kêng (**21**, vol. 1, p. 41). Interestingly enough, a person of this name is mentioned on a weapon, No. 34.6, discussed in this volume (p. 94).

Paragraphs (3) and (5) pose the question of the interpretation of character A mentioned above. Also in paragraph (5) is the question of whether or not the

character *ling* 令 refers to Nieh Ling or the *ming* 命 character. The exact interpretation of this paragraph cannot be known until we are sure of the significance of character A 㣈, but as we have said before, it seems rather likely that this is a name.

For many years past there has been a lively controversy in regard to the dating of this vessel and others such as our *huo* (*33.2*) which were discovered with it at Lo-yang in 1929. Two schools of thought dated these vessels respectively in the reigns of Ch'êng Wang and Chao Wang 昭王. The chief protagonist of the latter dating was Wu Ch'i-ch'ang (**87**, ch. 8, p. 21b). He took the *San t'ung li* 三統曆 calendar and computed it backward to the time of Wu Wang 武王, taking into careful account all items such as intercalary days, etc., which might affect it (op. cit., ch. A, pp. 16–35). It is of extreme interest to note that the results of his over-all calculations as to years connect exactly with those of Tung Tso-pin in his discussion of Shang dynasty dates (**69**). By means of this carefully worked out chronology, Wu Ch'i-ch'ang believed that he could tell exactly which years contained given days expressed on the bronzes in cyclical characters in given quarters of given moons. From this and other data appearing on the bronzes themselves he undertook to date exactly to the year, moon, and day a large series of inscribed bronzes. However, as Karlgren has pointed out, we do not have detailed knowledge of the various chronological systems known to have existed in the Chou dynasty, and we have no means of knowing which system a given scribe might have used in executing the text for a particular bronze (**29**, pp. 11–12). Another objection to this system is that it seems very unlikely that the rectification of the calendar by means of the calculation of intercalary days, etc., was made with the same accuracy as that displayed by Wu Ch'i-ch'ang. That is to say, in Chou times a given intercalation might perfectly well have been overlooked, and later attached to a different month, in which case the *San t'ung li* system as expressed by cyclical characters might be off as much as 60 days, while the over-all effect on the number of years would not necessarily be affected. Be that as it may, Wu Ch'i-ch'ang used this system plus two main points in the *fang i* inscription to propose an exact dating. The first of these points was the mention of the *K'ang Kung*, referred to above, which he argued, with great cogency, could refer only to an ancestral shrine to K'ang Wang, and therefore proved that this bronze was made after the time of K'ang Wang. The second point was the mention of the Annalist Nieh Ling in a bronze known as the Ling *kuei*. This inscription mentions an attack on Ch'u which he thought must refer to the reign of Chao Wang because wars with Ch'u are mentioned in the *Chu shu chi nien* 竹書紀年 as occurring in this reign. With these points in mind, he found that the 6th day of the 8th moon of the 10th year of Chao Wang (1043 B. C.) coincided with the month and day given first in our *fang i*.

The other side of the controversy was headed by Kuo Mo-jo (**32**, vol. 1, pp. 5b–10a), whose most important arguments may be summed up as follows: To begin with, he calls attention to paragraph (1) of the *fang i* inscription, "The King ordered Ming Pao, son of the Duke of Chou . . ." The duke here mentioned, he says, must be Tan, Duke of Chou, who carried on the government during Ch'êng Wang's minority. As an added proof of this, he cites a vessel known as the Ming Kung *kuei* 明公簋 bearing an inscription which mentions Duke Ming and, later, the

Marquis of Lu 魯侯 who are taken by him to be one and the same person, and therefore the same as the Duke Ming and Ming Pao mentioned in the *fang i* inscription. From the *Chu shu chi nien* we know that Po Ch'in 伯禽, eldest son of Tan, Duke of Chou, became Marquis of Lu during the reign of Ch'êng Wang. As an added proof, he cites what must be the Malcolm *kuei* noted above. A vessel known as the *ta fang ting* 大方鼎 which was one of the vessels discovered with the *fang i* is cited by Jung Kêng (**40**, vol. 3, p. 34b). This *ting* has an inscription which runs in part . . . *Kung tz'ŭ chu wu wang ch'êng wang ssŭ ting* . . . 公束鑄武王成王祺鼎, "Duke Tz'ŭ cast a sacrificial *ting* for Wu Wang and Ch'êng Wang . . ." From this we know that this *ting* was made after the time of Ch'êng Wang. However, the inscription also dedicates this *ting* to *Tsu Ting* 祖丁 or "Grandfather Ting," which indicates that it was made after the time of the *fang i* which is dedicated to *Fu Ting* or "Father Ting." In regard to the question of the meaning of *K'ang Kung*, Kuo Mo-jo (op. cit.) interprets it as simply the name of a palace in the same category as the *Ching Kung* also mentioned in the inscription. The account of the attack on Ch'u occurring in the Ling *kuei* he thought might refer to an attack on the Eastern Country recorded as having occurred during the reign of Ch'êng Wang. He cites, furthermore, a bronze known as the Ch'in *kuei* 禽𣪘 which mentions not only an attack on Ch'u, but also says "The Duke of Chou ordered Ch'in to be prayer master" (op. cit., pp. 11, 12). Thus he links all these bronzes together as of the reign of Ch'êng Wang.

Now Jung Kêng as recently as 1941 has listed 91 bronzes as being of Ch'êng Wang date (**21**, vol. 1, pp. 42–48). He heads the list with a vessel known as the Hsien Hou *ting* 獻侯鼎, the inscription in which runs in part 唯成王大桒在宗周 . . . or "Now Ch'êng Wang performed a great [ritual] at Tsung-chou . . ." This group includes our *fang i*, and 31 bronzes of the Ch'ên-ch'ên group of which our *huo* (33.2) is one, and all 91 seem to be interconnected in some way by the mention in their inscriptions of names of persons, places, events, or by circumstances of discovery, etc. This seems to tip the scales in favor of Kuo Mo-jo's contention of a Ch'êng Wang date. This being the case, but with no intention of insisting on an accurate dating to the day, it may be interesting to see how our *fang i* date would fare in Wu Ch'i-ch'ang's calendar for the reign of Ch'êng Wang. Our inscription names two months and five days as follows: 八月辰在甲申 "the 8th moon, on the day *chia shên*," the day *ting hai* 丁亥 in the same moon, and 十月月吉癸未, "the 10th moon in the first quarter on the day *kuei wei*," also the days *chia shên* 甲申 and *i yu* 乙酉. Using Wu Ch'i-ch'ang's table there is only one year (1085 B. C.) during the reign of Ch'êng Wang when these combinations occur as given in the inscription, and the above dates correspond as follows: The 2d and 5th days of the 8th moon, and the 2d, 3d, and 4th days of the 10th moon. Admittedly it would be extremely hazardous to claim such an exact date, but it may be worth noting that it is only 42 years earlier than Wu Ch'i-ch'ang's contention of the 10th year of Chao Wang.

PLATE 23

33.2 Ceremonial vessel of the type *huo*.

Decorations incised in low relief. Smooth gray-green patina. Inside the cover an inscription of 50 characters, of which the last 4 are repeated in an inscription under the handle. (See cut.)

Chou dynasty. Height 8¾ in., width 8¼ in. (.223 x .210 m.) over all.

(A. G. W., 1944.) This *huo* is one of a group of 19 bronze vessels bearing the name Ch'ên-ch'ên 臣辰, and said to have been discovered at Lo-yang 洛陽, Honan Province, in 1928. One of these vessels, a *yu*, which is very different in execution, bears the same inscription as this *huo*, while the remainder of the inscriptions vary in one way or another. This group of signed vessels accordingly is known as the

唯王大禴于宗周A
餈莠京年在五月
旣望辛西王令士
EB史C簋于成周D
百姓豚E賞卣鬯貝用
作毀寶尊彝臣辰册先



Ch'ên-ch'ên group. Interconnected with this group by the mention of names in their various inscriptions were 12 other bronzes which are recognized as part of the Ch'ên-ch'ên group (**21**, vol. 1, pp. 44, 45, 387). The total find discovered at the same time appears to have amounted to some 35 vessels, and these include our *fang i* (30.54), with its long and different inscriptions. The marked epigraphical similarities in the inscriptions plus the fact that these bronzes appear to have been discovered together suggests that all are of approximately the same date. This makes the group as a whole extremely important not only on account of the inscriptions, but also on account of the considerable differences in types of decorative technique on the various vessels of the Ch'ên-ch'ên group, as well as on the others. Thus, if we may date two such differently conceived vessels as our *fang i* (30.54)

and this *huo* as of approximately the time of Ch'êng Wang, a considerable change must be forthcoming in methods of dating on stylistic grounds alone.

Two inscriptions appear on the *huo*, one inside the cover, and the other under the handle. The cover inscription is composed of 50 characters arranged in 6 columns. That under the handle has four characters recording the name of the scribe, Ch'ên-ch'ên, which also occurs at the end of the cover inscription. These inscriptions have been ably discussed by Jung Kêng (**40**, vol. 3, p. 29a-b), Kuo Mo-jo (**32**, vol. 1, p. 32a-b), and Kuo Ting-t'ang (**34**), and the accompanying rendition of the cover inscription into modern characters is based on their findings.

In this inscription there are four characters which may be open to question, and on the rendition of which complete agreement has not been reached. A 𢓊, the last character in the first column, is considered by Kuo Ting-t'ang, Kuo Mo-jo, and Jung Kêng as a verb, while Lo Chên-yü, discussing its occurrence in another inscription (**44**), reads it as an unidentified name. This character written in the same manner occurs on at least five bronzes including this *huo* and our *fang i*, and if it is a name it offers further proof of a close connection in time between these vessels. It also occurs in a slightly variant form on two other bronze vessels (**20**, ch. 2, p. 26b). Among the above-mentioned five vessels is a *chih* bearing a seven-character inscription in which the character in question is obviously a name (**45**, ch. 14, 55a). Also the context of the *fang i* inscription seems less strained if the character is so taken.

The context of the inscription in this *huo* admits of its being either a verb or a name, but however this may be, the epigraphical similarities of the two inscriptions bracket them closely in time. E 二, the first character in column four, has been identified with the characters *shang* 上 and *êrh* 二, and the former identification seems the most likely. Indeed both Jung Kêng and Kuo Mo-jo agree on this point. C 𡩜, the fourth character in column four is generally conceded to be *yin* 寅, although Kuo Mo-jo disagrees with this and says it is *huang* 黃. Here again Jung Kêng's list of both characters as they appear on bronzes (**20**, ch. 13, p. 15; ch. 14, p. 26), really leaves both choices open, but perhaps the former is best. D 𠭯, the last character in column four, has not been identified, but it is generally agreed that its meaning is something like that of *li* 禮 or *shang* 賞, and it certainly seems to indicate some sort of ceremonial operation. B 眔 is taken to be a conjunction as noted on p. 43.

The sense of the inscription is clear and, with the above possible divergencies in mind, may be rendered as follows:

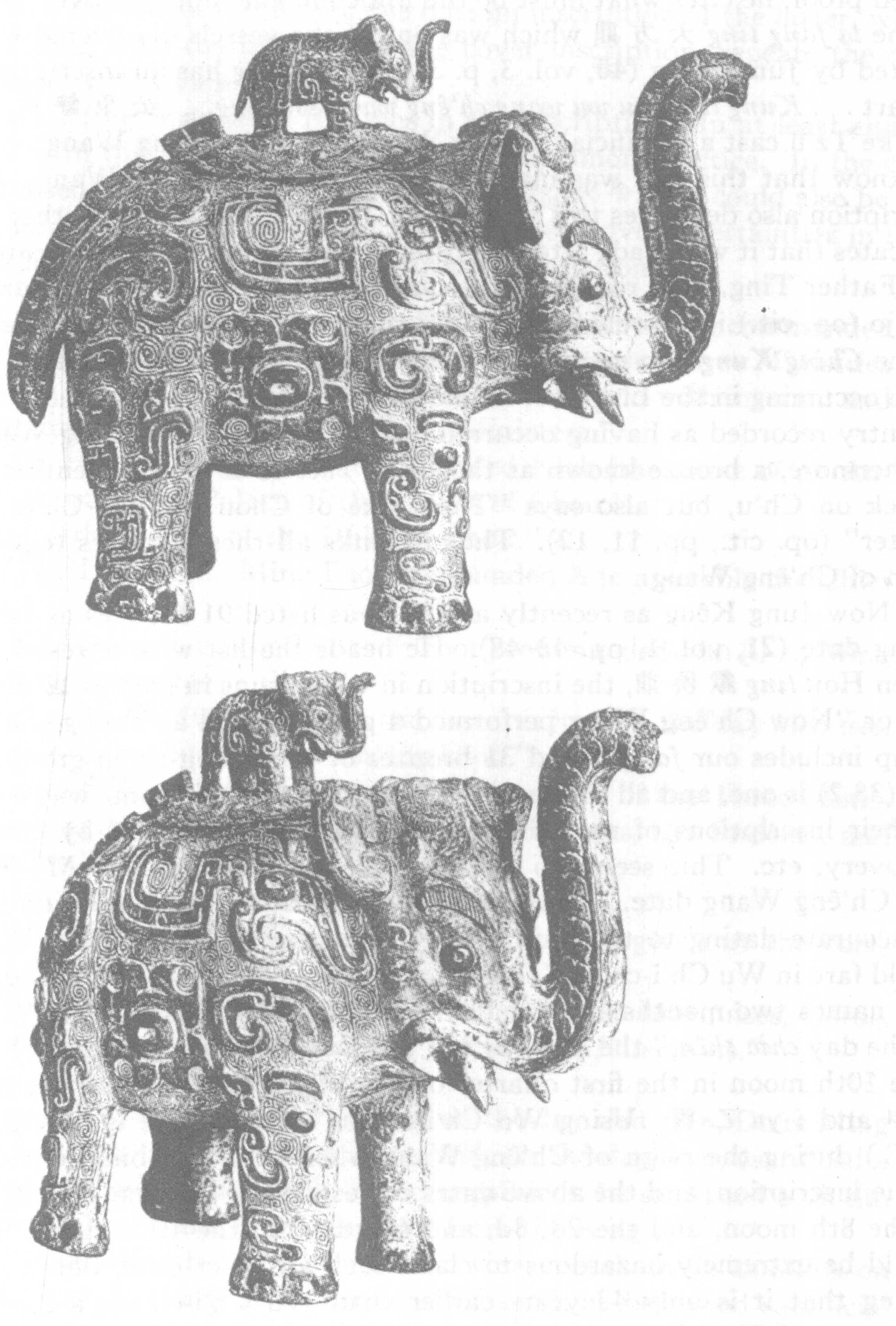
> "Now in the year when the King made a great *yo* ceremony at Tsung-chou A entertained him [or, he (the King) went and lodged] at P'ang-ching. In the fifth month, the third quarter on the day *hsin yu* the King commanded the Prime Minister and the Annalist Yin to convene at Ch'êng-chou, and D [offer?] pork for the hundred officials, and bestow a *yu*, aromatic wine, and cowries to be used to make for Father Kuei a precious sacral vessel.
>
> Recorded by Ch'ên-ch'ên, Hsien."

The *yo* 禴 ceremony mentioned in the inscription appears to have been one of four seasonal ceremonies in honor of the ancestors and took place in the summer (**6**, vol. 1, p. 422, and **12**, 春官大宗伯, p. 8b). This ceremony is also mentioned in the *Book of Poetry* (**35**, vol. 4, pt. 2, p. 257).

Tsung-chou is well known as an honorific designation for the Chou capital Hao 鎬 established by the first Chou King, Wu Wang 武王, while P'ang-ching has been identified with Fêng 豐, the capital of Wên Wang 文王. The two places probably were situated only a few miles apart in modern Shensi Province south of Hsi-an. According to the *Annals of the Bamboo Books*, Ch'êng-chou was established in the 5th year of the reign of Ch'êng Wang 成王 (**35**, vol. 3, pt. 1, p. 145). It was located near Lo-yang in Honan, where this vessel is said to have been found.

As in the case of our *fang i* (30.54) there has been a divergency of opinion as to the date of this vessel. Wu Ch'i-ch'ang, using the *San t'ung li* calendar, dated this vessel the 17th day of the 5th moon of the 11th year of Chao Wang (1044 B. C.) (**87**, ch. 6, p. 25b). Kuo Mo-jo, however, believes it to be of Ch'êng Wang date (loc. cit.), and Jung Kêng now agrees with him, listing it with our *fang i* among 91 vessels of the time of Ch'êng Wang (see 30.54). As noted in discussing the latter bronze, all 91 vessels seem to be interconnected by the mention in their inscriptions of the names of persons, places, events, or by circumstances of discovery, etc. In this connection, it should be pointed out that the bronze heading Jung Kêng's list of 91 bears an inscription which begins: "Now when Ch'êng Wang made a great [rite] at Tsung-chou . . ." (see 30.54). This recalls the beginning of the inscription on this *huo*, "Now in the year when the King made a great *yo* ceremony at Tsung-chou . . ." It seems quite possible that these two inscriptions may refer to the same event.

Plate 24



36.6

Plate 23



33.2

PLATE 25

37.1 Ceremonial vessel of the type *yü*.

Surface of rough green patina, with small areas of unaltered metal and earthy incrustation. Decoration in low relief, high relief, and intaglio. Inscription of seven characters. (See cut.)

Chou dynasty. Height 16 7/16 in., width 22 1/4 in. (.418 x .565 m.) over all.



(A. G. W., J. A. P., 1944.) The first and last characters of the inscription are, as yet, undeciphered. The others repeat the common formula *tso pao tsun i* 作寶尊彝 ". . . made this precious sacral vessel . . ."

PLATE 24

36.6 Ceremonial vessel of the type *huo*.

In the form of an elephant. Surface of light green patina. Decoration cast in low relief, with finial in the round.

Chou dynasty. Height 6 3/4 in., length 8 3/8 in. (.172 x .212 m.) over all.

Plate 26

35.22

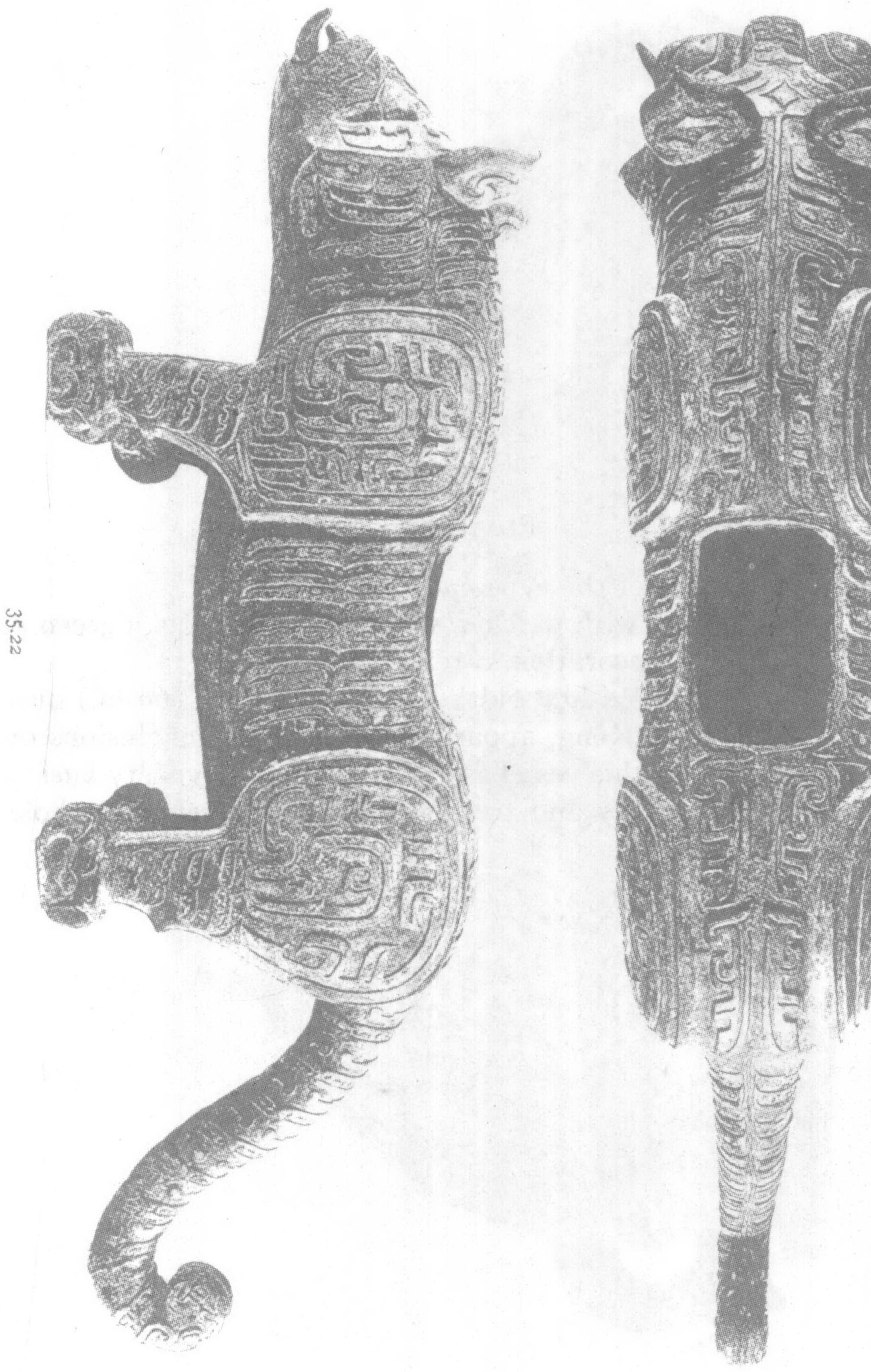


Plate 25

37.1



Plates 26 and 27

35.21-35.22 Tigers, with open, hollow chamber in the center.

Surface of green patina with traces of earth adhesions. Decoration cast in low relief.

Chou dynasty. 35.21, height 9⅞ in., length 29⅝ in. (.252 x .752 m.) over all; 35.22, height 9⅞ in., length 29⅞ in (.252 x .759 m.) over all.

(A. G. W., 1944.) According to a manuscript note by Ch'u Tê-i 褚德彝, written in 1935, these two bronzes were unearthed in the district of Pao-chi-hsien 寶雞縣, in Fêng-hsiang-fu 鳳翔府, Shensi Province, in 1923. Referring to the *Shan-hsi shêng chih* 陝西省志 he says, in part, that this territory was included in the territory of Chi which appertained to Hsi Po Ch'ang 西伯昌, the Chief of the West, who became Wên Wang 文王, the first ruler of the Chou dynasty.[6]

[6] For further discussion of Wên Wang's career, cf. 39.52, pp. 83, 84.

Plate 27

35.21

35.22

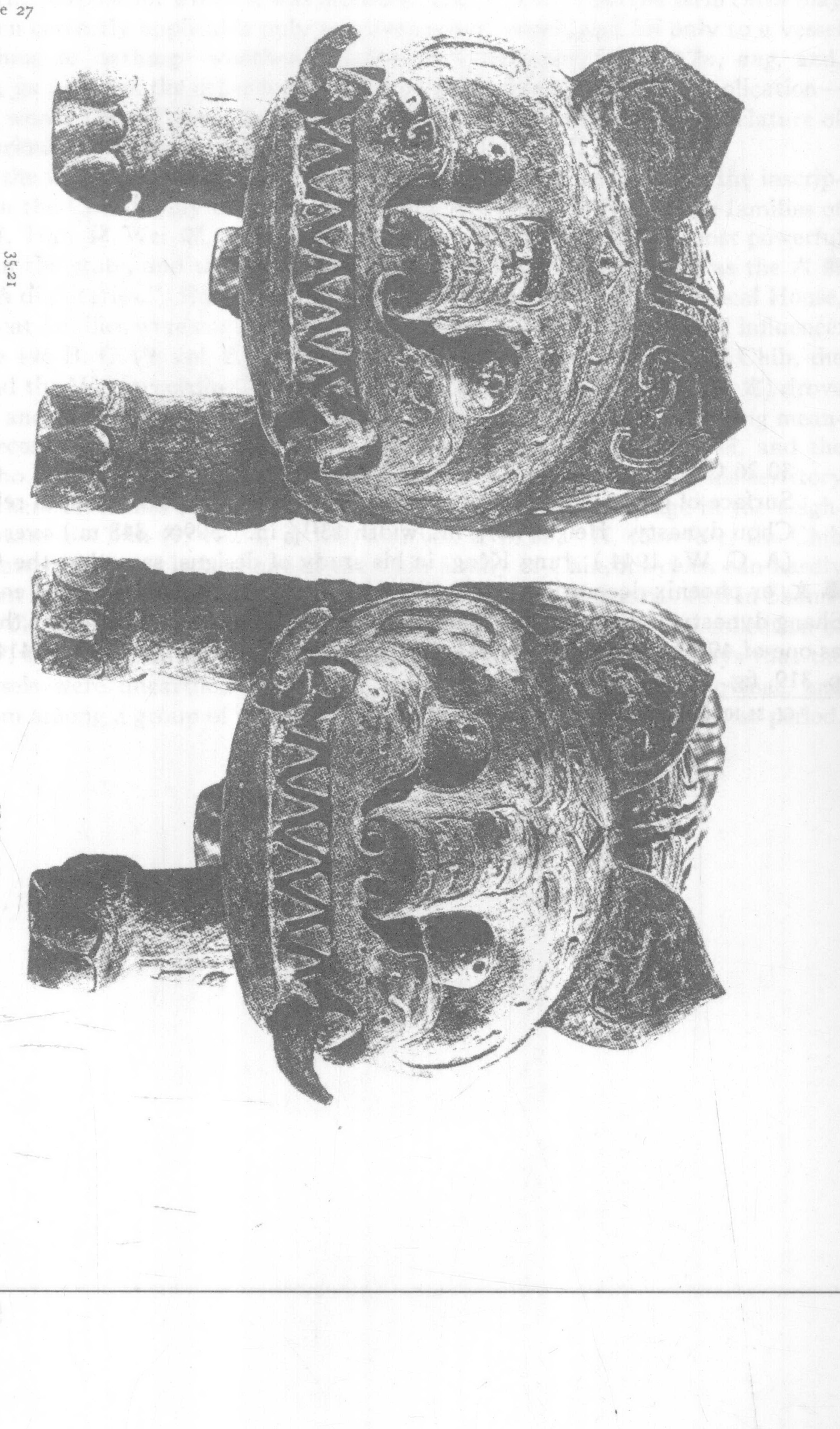
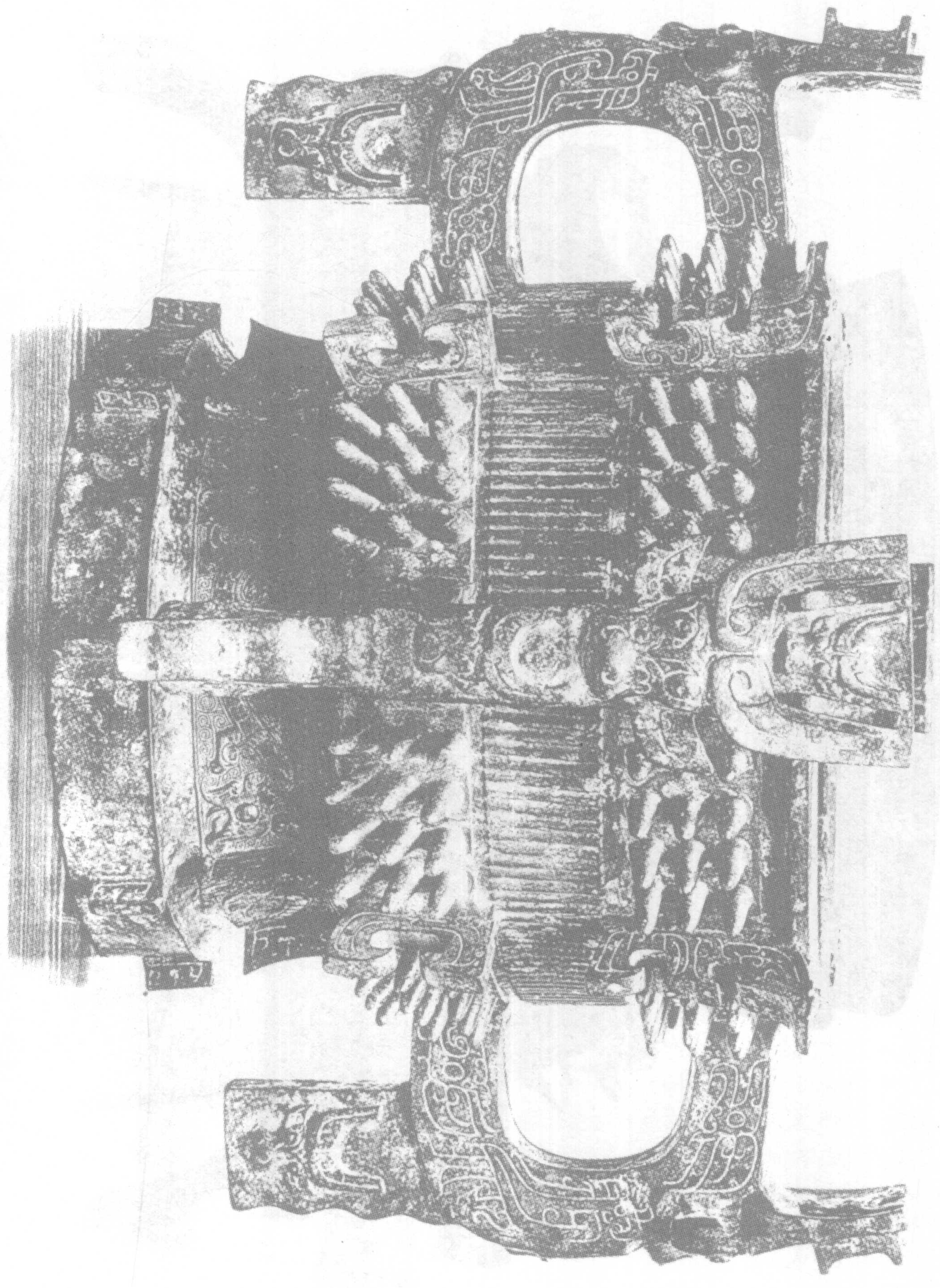


Plate 28



31.10

PLATE 28

31.10 Ceremonial vessel of the type *kuei*.

Surface of silvery patina with patches of green aerugo; rough green patination inside; azurite under foot. Decoration in relief and intaglio.

Chou dynasty. Height $9\frac{1}{8}$ in., width $14\frac{7}{16}$ in. (.231 x .366 m.) over all.

(A. G. W., 1944.) Jung Kêng, apparently basing his conclusions on the elements of the decoration, lists this vessel as one of 59 Shang dynasty *kuei* (**21**, vol. 1, p. 335), but the general quality and treatment of the vessel as a whole strongly suggests a later date.

PLATE 29

30.26 Ceremonial covered vessel of the type *yu*.

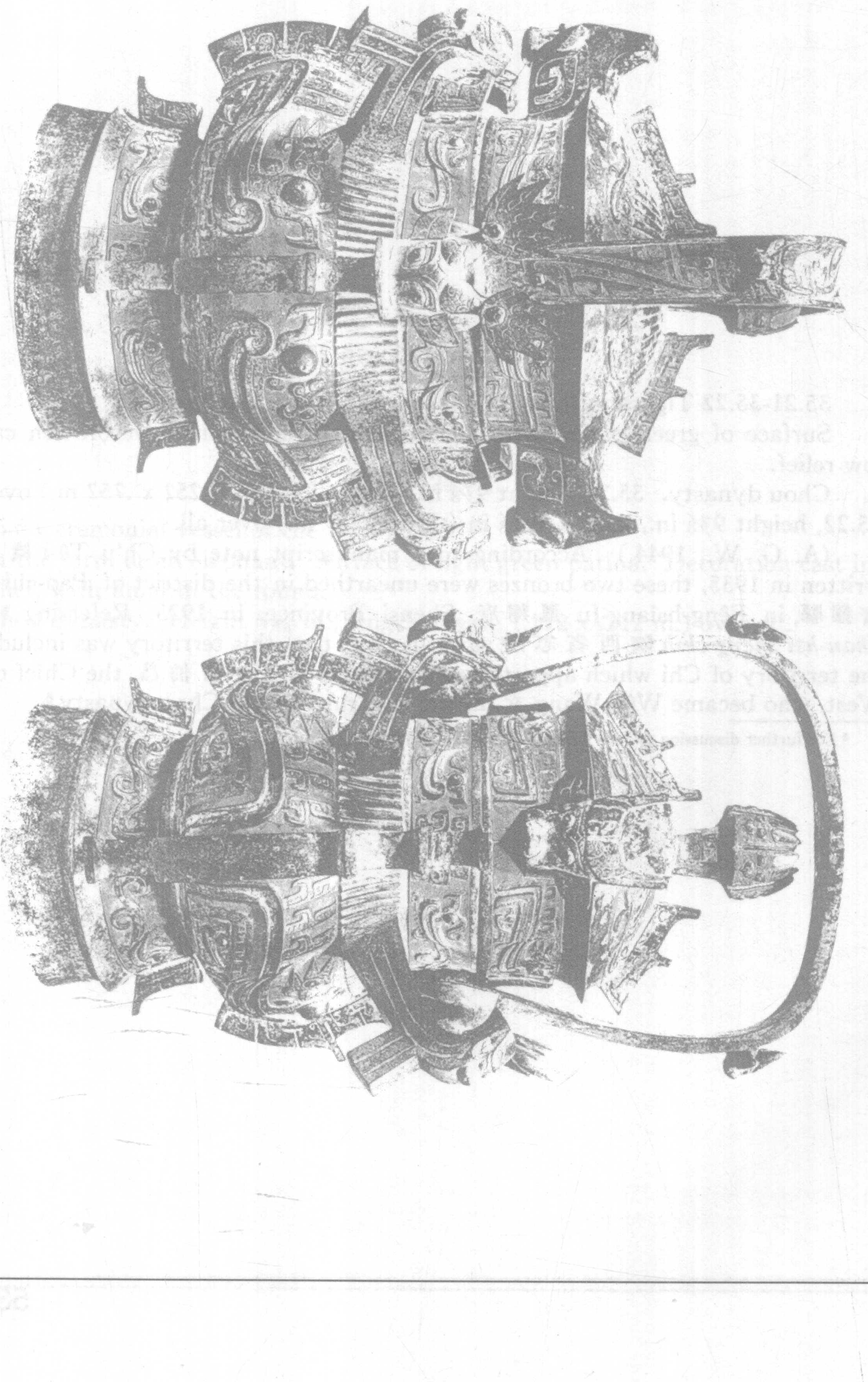
Surface of green patina, with areas of brownish red. Decoration in relief.

Chou dynasty. Height $20\frac{1}{16}$ in., width $13\frac{11}{16}$ in. (.509 x .348 m.) over all.

(A. G. W., 1944.) Jung Kêng, in his study of designs, says that the *fêng wên* 鳳文, or phoenix decoration, which appears on this vessel begins at the end of the Shang dynasty and continues through the Western Chou period. He lists this vessel as one of 49 Shang dynasty vessels of the type (**21**, vol. 1, pp. 125 and 414; vol. 2, p. 319, fig. 612).[7]

[7] Cf. 31.10 for dating used here.

Plate 29



Side

End

30.26

Plate 30



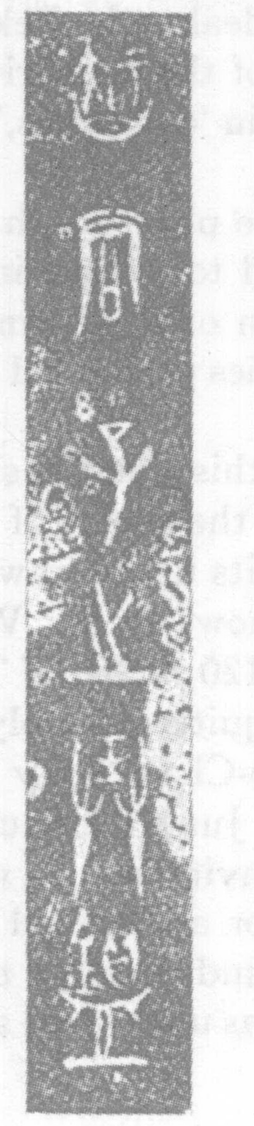
39.5

PLATE 30

39.5 Ceremonial vessel of the type *chien*.

Even pale green patination sprinkled with granular incrustations. Inscription of six characters inside. (See cut.)

Late Chou dynasty. Height 8⁵⁄₁₆ in., width 20⅜ in. (.227 x .518 m.) over all. (J. E. L., 1939.) In the *Shuo wên* (sub verbo) *chien* 鑑 is defined as *ta p'ên* 大盆 "a large basin." In the *Chou li* (**12**, 天官, 凌人; and **6**, vol. 1, p. 106), a *chien*—evidently a vessel of some sort—is said to have been used, on occasion, to hold food, wine, or ice. Both the *Shuo wên* and the *Chou li* (**12**, 秋官, 司烜氏; and **6**, vol. 2, p. 381) refer also to a kind of *chien* which was used to "receive bright water from the moon"; but whether the "bright water" was dew or moonlight, and



whether the *chien* which caught it was a vessel or a mirror is by no means certain. More specifically, the Commentary on the *Chou li* (凌人) likens the *chien*, which was used for ice, to a (pottery) jar (*chui* 甀) with a wide mouth. On the other hand, many compilers of Chinese catalogues of bronzes have been so indiscriminate in using the terms *chien*, *p'ên*, *ang* 盎, *yu* 盂, and *hsi* to designate a variety of basin-like forms, that it is now hardly possible to determine, from the shape of a vessel, which of the above terms is properly applicable to it. Fortunately, however, there is no uncertainty in the present case, since the inscription reads: 智君子之弄鑑 "*Chien* made by the Noble Chih." This vessel, then, is definitely a *chien*, and a belief that it was used for a ceremonial purpose such, e. g., as the *Chou li* (凌人)

describes, is supported by the character—possibly by the mere existence—of the inscription. To me, indeed, it seems probable that knowledge of whether a vessel should be called a *chien*, a *p'ên*, an *ang*, a *yu*, or a *hsi* may well depend upon knowledge of the purpose for which it was intended, and that whereas the term *chien* may have been correctly applicable only to a ceremonial vessel, and *hsi* only to a vessel for washing or bathing—whether ceremonial or not—the terms *p'ên*, *ang*, and, perhaps, *yu* were, on the other hand, far more general in their proper application—like our words "basin" and "bowl." At present, in any case, the nomenclature of these various basinlike vessels is by no means well defined.

On the whole it seems reasonable to associate the "Noble Chih" of the inscription with the Chih family of the state of Chin 晉. This family and the families of Chao 趙, Han 韓, Wei 魏, Fan 范, and Chung-hang 中行 were the most powerful groups in the state, and their several leaders were known collectively as the 六卿 "six high dignitaries." Emboldened by the growing weakness of the Ducal House, these great families were constantly fighting one another for position and influence. Thus, in 496 B. C. (**9**, vol. 2, pp. 51–53) the Chih and the Chao (or the Chih, the Han, and the Wei, according to the *Tso chuan*, 13th year of Duke Ting 定) drove the Fan and the Chung-hang from the state. Again, in 453, the Chih, having meanwhile become supremely powerful, were set upon by the Han, the Wei, and the Chao who killed Chih Po 智伯, the able leader of his family, divided his territory among themselves and forced his son Chih K'ai 智開 to take refuge in the neighboring state of Ch'in (**9**, vol. 4, p. 139, and vol. 2, p. 55). If, therefore, the Chih of this inscription was indeed one of the Chih family of Chin, his *chien* can hardly have been made later than 453 B. C., and is likely to have been excavated in Shansi.

(A. G. W., J. A. P., 1944.) A mate to this vessel is now in the collection of Alfred F. Pillsbury, of Minneapolis. Jung Kêng (**21**, vol. 1, p. 470) says that the two vessels were unearthed in 1938 at Hui-hsien 輝縣 in Honan Province, and lists them among a group of eight vessels of the type of the Warring States period.

PLATE 31

32.13 Covered food vessel.

Ellipsoid in section, with one large and one small fragment missing from cover. Two annular handles opposite on the minor axis. Three ducks and two stops on cover. Decorated with two horizontal bands of diaper pattern on the vessel. Patches of azurite, malachite, and cuprite patination inside and out.

Late Chou dynasty. Height 6¹⁄₁₆ in., width 7⁵⁄₁₆ in. (.153 x .164 m.) over all. (J. E. L., 1932.) I do not know just how this piece should be classified as to type unless it be called a *kuei* or *hsü*. I am not aware of any vessel, actual or illustrated, exactly like it; but perhaps it is not, strictly speaking, a sacrificial vessel.

A large proportion of the original surface is still intact, especially inside the vessel, and the patination is nowhere very deep. There is a relatively small amount of mineral incrustation due to burial. Originally, no doubt, there were four small stops serving to keep the cover in position. Two are still perfect; the overhang of a third is broken off, and a fourth has vanished with the large fragment that is missing. Neither of these fractures seems to be very old, and about 2 centimeters from the broken stop is a small crack in the cover which is probably contemporary with them. This crack is about 1 centimeter long and causes a slight dislocation of the edge of the cover but is otherwise hardly noticeable outside.

At either end of the major axis of the vessel there is a vertical line of division and slight dislocation across the broader band of diaper pattern. This may indicate the use of a two-piece mold. The narrower band is simply a horizontal section of the same design. Vessel, cover, and decorations are all of the finest workmanship.

This bronze, together with a number of others, is reported (cf., e. g., **55**; **79**) to have been excavated at or near a village called Li-yü, in northern Shansi, and from the notes of Monsieur L. Wannieck, by courtesy of his widow, we have the following information:

"The treasure of Li-Yu was discovered in March, 1923. The village of Li-Yu is situated 120 *li* south, south-east of Ta-Toung-Fou, and 12 *li* west of the under-prefecture of Huan-Yn-Chow, situated in northern Shansi.

"The towns of Li-Yu and Huan-Yn-Chow are to be found at the foot of the northern slope of Ho-Chan, one of the five sacred mountains of China.

"It was after a storm had broken down a cliff that the treasure was discovered. A peasant who came down from the mountain perceived a large excavation, and in this excavation he saw the bronzes. Immediately, he went to the village of Li-Yu to tell the inhabitants, who returned with him to this point and, with the aid of pickaxes and mattocks, removed from these holes a number of bronzes.

"In the greed for gain they made their search hurriedly, which had the disadvantage of destroying nearly two-thirds of the pieces, and they carried away the remainder.

"The next day, the Prefect of Huan-Yn-Chow, being informed of these finds, sent to Li-Yu a detachment of soldiers who searched the houses and carried away 17 pieces. As a recompense for these 17 pieces, the Prefect gave the inhabitants of the village a certain sum of money.

"The bronzes were shown at the Yamen of Huan-Yn-Chow.

"At this time I was in the Ordos searching for Scytho-Siberian objects. Upon hearing of the discovery in question, I went immediately to the place where, by the courtesy of Reverend Father Vleschouwer, I learned the details of this discovery. Following his advice, I established myself in Li-Yu and succeeded in acquiring all the other bronzes which the peasants had hidden from the soldiers.

"I then tried to make arrangements with the Government for the acquisition of the 17 pieces, but my efforts were in vain.

"I left the place after giving the necessary instructions to the Reverend Father Vleschouwer to try to purchase the 17 pieces at any price.

"The following year, 1924, the Reverend Father Vleschouwer made a contract of sale with the authorities, which contract I possess in good and due form.

"However, certain antique dealers in Peking prevented me from taking the objects away, and the bad faith of the authorities went even to the length of substituting bronzes bought by certain 'casseroles,' at the same time exacting the price agreed upon.

"Happily, I had taken care to photograph the bronzes, and I was in a position to refuse those which they wished to sell me in their place . . .

"Last year after the invasion of the town of Huan-Yn-Chow by the soldiers of Fê(ng)-Yu-Hsiang the authorities pretended that the bronzes had been destroyed and carried off . . .

"The Chinese have declared this was the site of a sacrifice which the Emperor Tsin-Che-Huang-To(Ti) made to the spirits of the Holy Mountain, but there is no accurate information which permits us to draw this conclusion."

No doubt the Huan-Yn-Chow of M. Wannieck's note is Hun-yüan-chou 渾源州 (now hsien 縣), situated 120 *li* SE. of Ta-t'ung; and 18 *li* SW. thereof is a place called Li-yü 李峪 which, quite probably, is the reputed site of the "find." What mountain Wannieck's "Ho-Chan" may be, I do not know.

(A. G. W., J. A. P., 1944.) Jung Kêng classifies this vessel as a *tui*, but his classification as a whole is not convincing. It might just as well be considered as a late variation of the type *kuei*, or a modified form of the type *tou*, with both of which it has much in common, and perhaps the latter type is the most suitable. Jung Kêng says that this vessel was unearthed at Hun-yüan 渾源 in Shansi Province (**21**, vol. 1, p. 368).

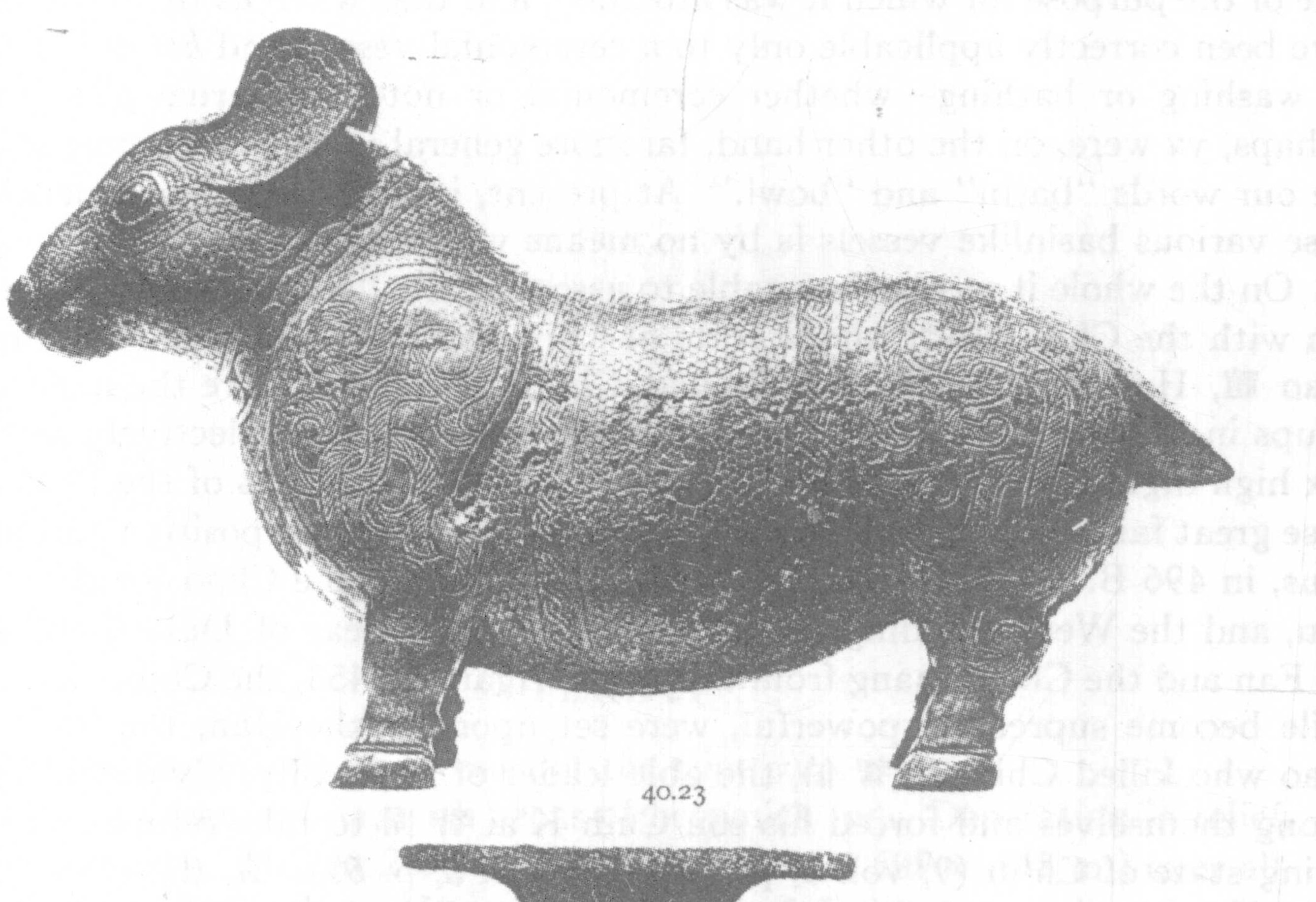
Plate 31





32.13

Plate 32



40.23



39-41

PLATE 32

40.23 A quadruped.

Surface almost entirely covered with linear and countersunk naturalistic and decorative designs. Smooth gray-green patina with scattered incrustations of green and blue. Vent in belly.

Late Chou dynasty. Height 4½ in., length 7³⁄₁₆ in. (.115 x .182 m.) over all.

(J. E. L., 1940.) The creature is evidently an ungulate mammal of some sort, the heavy body, short, stout legs, large ears and rudimentary tail suggesting a tapir, while the hoofs do not. Incidentally, the Malayan tapir seems to be the only animal of the kind native to Asia; but tapir bones are reported from the excavations at An-yang (**13**, p. 76). The pebbling and scales of various sizes which cover so much of the surface may be intended to suggest skin texture or hair. The collar of cowrie shells, the two bands encircling the body, and the narrower branching band running from nose to tail are suggestive of harness, while the designs on the fore and hind quarters seem to be purely decorative. Ceremonial vessels made in the shape of this animal are commonly called *hsi tsun* 犧尊, the character *hsi* meaning a sacrificial victim of uniform color—more specifically, an ox, sheep, goat, or pig—fit to be offered in sacrifice (hence: spotless, pure). This term seems to have been derived, not from the text of the *Chou li*, as is sometimes implied (**61**, pt. 1, pl. 34), but from the Commentary on that text by Chêng Hsüan 鄭玄, who suggests that in the name of a ceremonial vessel which the *Chou li* calls a *hsien tsun* 獻尊 (**12** 春官司尊彝; and **6**, vol. 1, pp. 472–473), the term *hsi* should be substituted for the term *hsien*. In this, however, he is not consistent, because he specifies the *hsien tsun* as first of the group of "six *tsun*" to which the *Chou li* refers in an earlier passage (**12** op. cit.; and **6**, vol. 1, pp. 445–446). Nevertheless, the term *hsi tsun* has been generally adopted by cataloguers as the correct name of the ceremonial vessel made in the shape of this animal and, indeed, it is not important to the present zoological inquiry whether *hsien* or *hsi* be accepted as the proper term. *Hsien*, meaning a fat dog suitable for sacrifice (hence: to offer), is more precise than *hsi*; but in describing this particular kind of *tsun*, either term might merely mean a sacrificial animal of some vague sort, or might be taken in one of its other senses, such as "offering" (*hsien*) or "spotless" (*hsi*), while neither can well be understood as the specific name of an animal which, though plump enough, perhaps, for sacrifice, is certainly not a dog nor yet an ox, a sheep, a goat, or a pig. In any case, a good many examples of this type of *tsun* have been reproduced in the standard catalogues, and in the *Hsi ch'ing ku chien* (**38**, ch. 9, pp. 27–39) for instance, it is noticeable that although the dozen animals represented are all essentially like ours and, therefore, as Euclid might say, like one another, there are, nevertheless, substantial differences among the types of hoofs with which the beasts are provided—some having cloven, some solid, hoofs; more artiodactyl, some perissodactyl; and one of the latter (op. cit., p. 29) with three toes to each foot, like the hind feet of a tapir. The first vessel in this group (op. cit., p. 27) is attributed to the Chou dynasty and bears an inscription in which the vessel itself is referred to as a *hsi tsun*. As published, this inscription has somewhat the appearance of an inked squeeze;

but, like all the inscriptions in the *Hsi ch'ing ku chien*, it is really a copy and thus less reliable than a true reproduction. There is, however, no good reason to think that the cataloguer misread it or misjudged the age of the vessel, inasmuch as the *Tso chuan*, in the 10th year of Duke Ting 定 (499 B. C.), refers to a *hsi* vessel of some sort—probably a *tsun* (**35**, vol. 5, pt. 2, p. 775, line 1).

(A. G. W., J. A. P., 1944.) Animals of this type were among the objects found at Li-yü, from which find our vessel No. 32.13 is said to have come (**55**, pl. 50; **79**, p. 25, pl. 20, 2; pl. 21, 1, 2).

39.41 Ceremonial covered vessel of the type *tou*.

Crusty green patina with design inlaid in gold, and two annular handles on opposite sides.

Late Chou dynasty. Height 5$\frac{15}{16}$ in., width 7$\frac{7}{16}$ in. (.151 x .189 m.) over all.

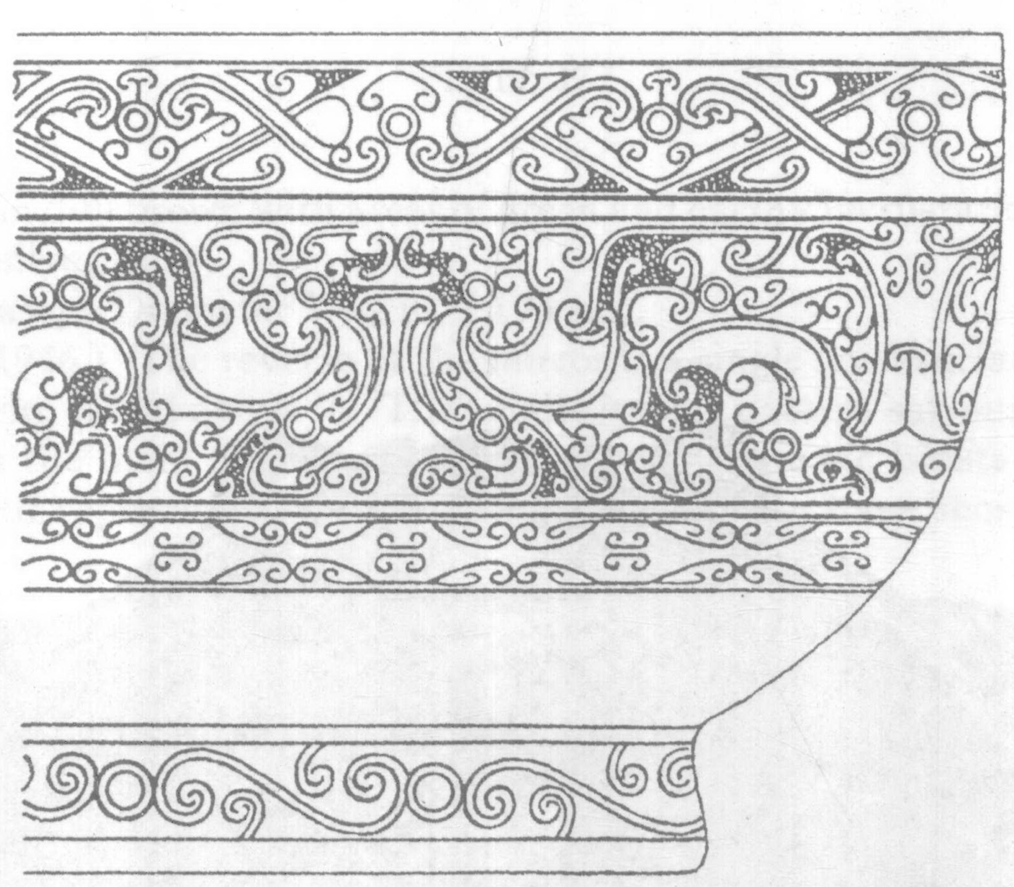
Plate 33

38.7 Food vessel with cover.

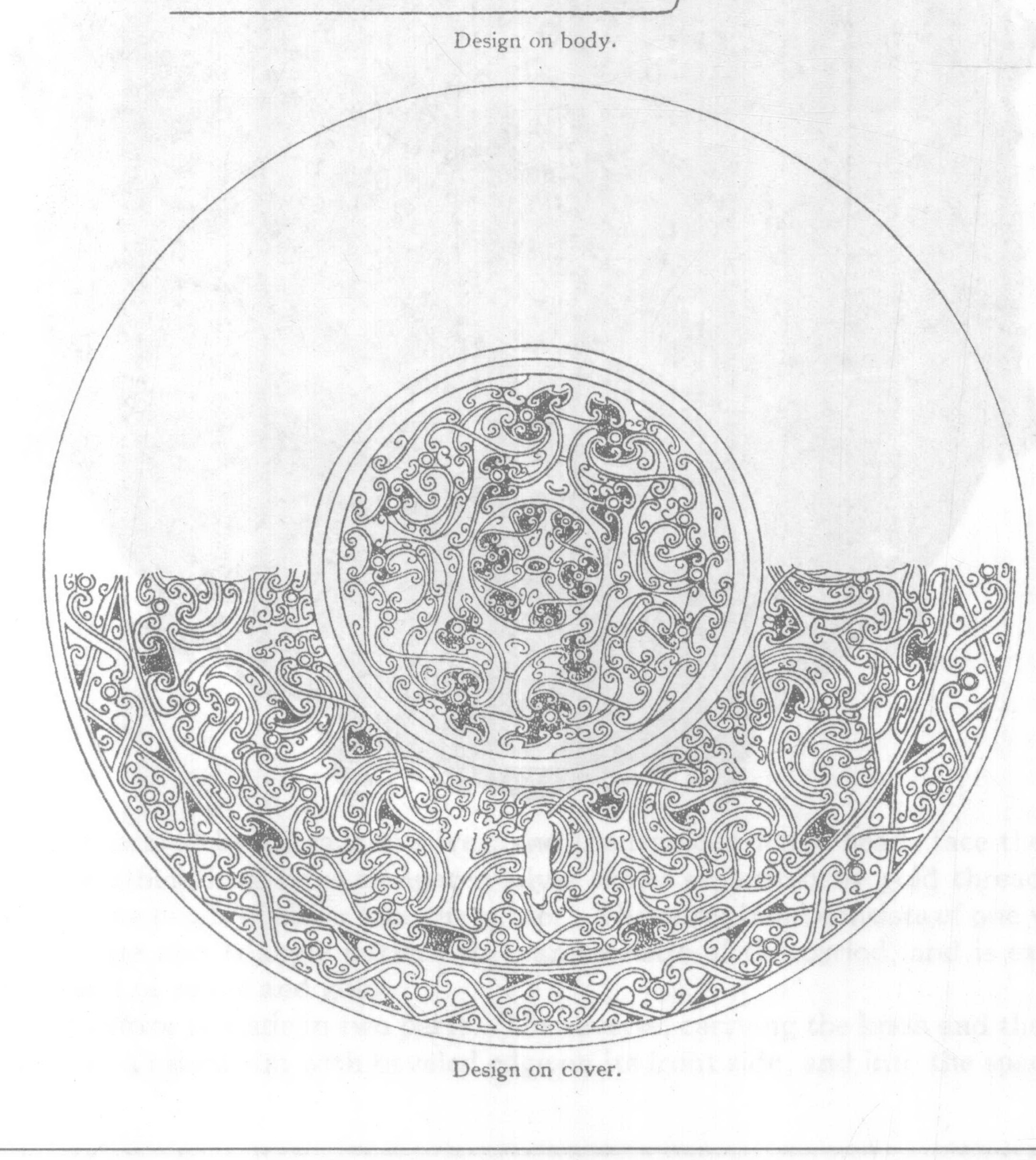
Surface of smooth gray-green color outside with patches of incrustation; rough green inside. Decoration inlaid with silver; mask-and-ring handles, and four upright handles on top of cover in relief.

Late Chou dynasty. Height 5$\frac{13}{16}$ in., width 8$\frac{3}{4}$ in. (.148 x .222 m.) over all.

(A. G. W., 1944.) The classification of this vessel as to type is not clear. It might well fall into Jung Kêng's rather nebulous class of the type *tui* but also has much in common with the type *kuei* (cf. notes on 32.13). The four handles on the cover indicate that it could be turned over and used as a container supported by the handles. The vessel is unusual, both in design and type, and the inlaid decoration is of remarkable quality.



Design on body.

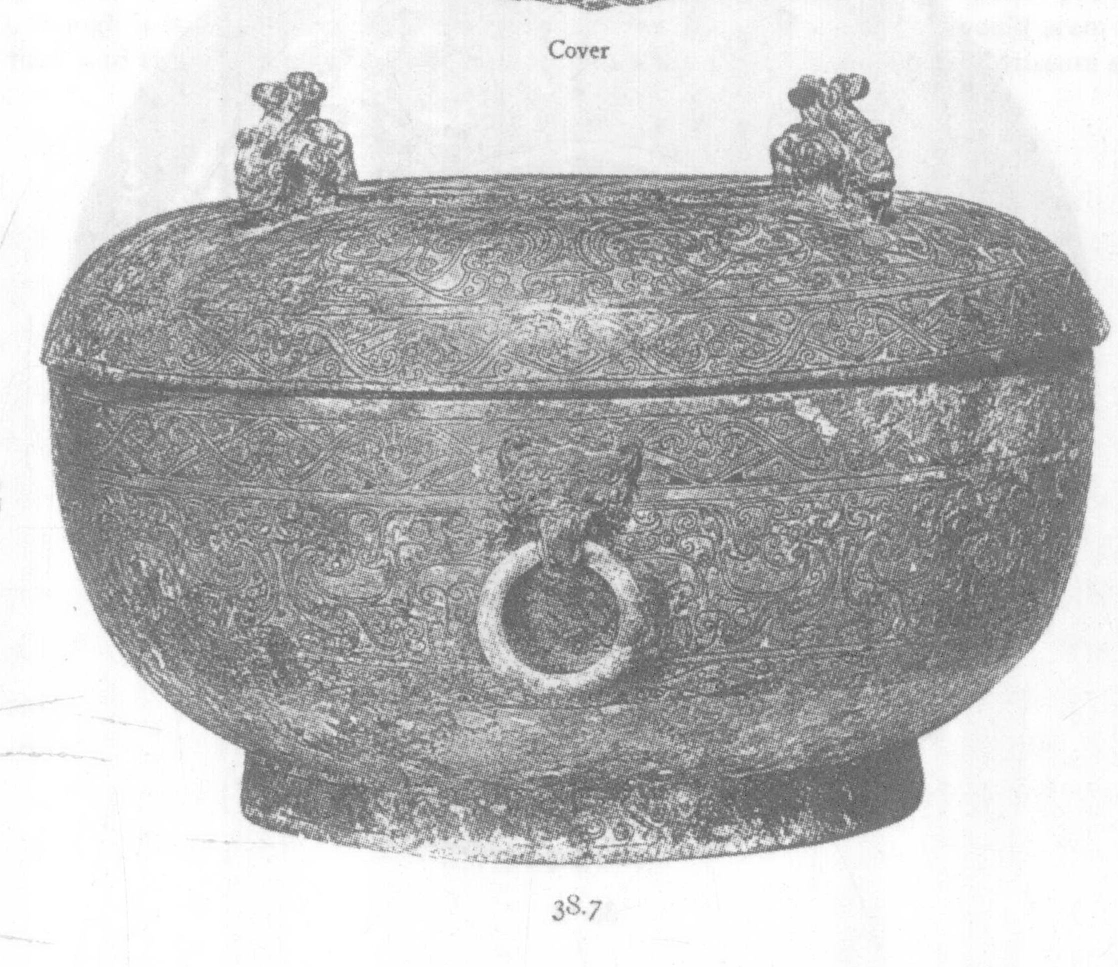


Design on cover.

Plate 33



Cover



38.7

Plate 34



41.9

PLATES 34 AND 35

41.9 Bell of the type *chung*.

Pale green patination with patches of blue, and granular incrustation. Decorated with casting in relief.

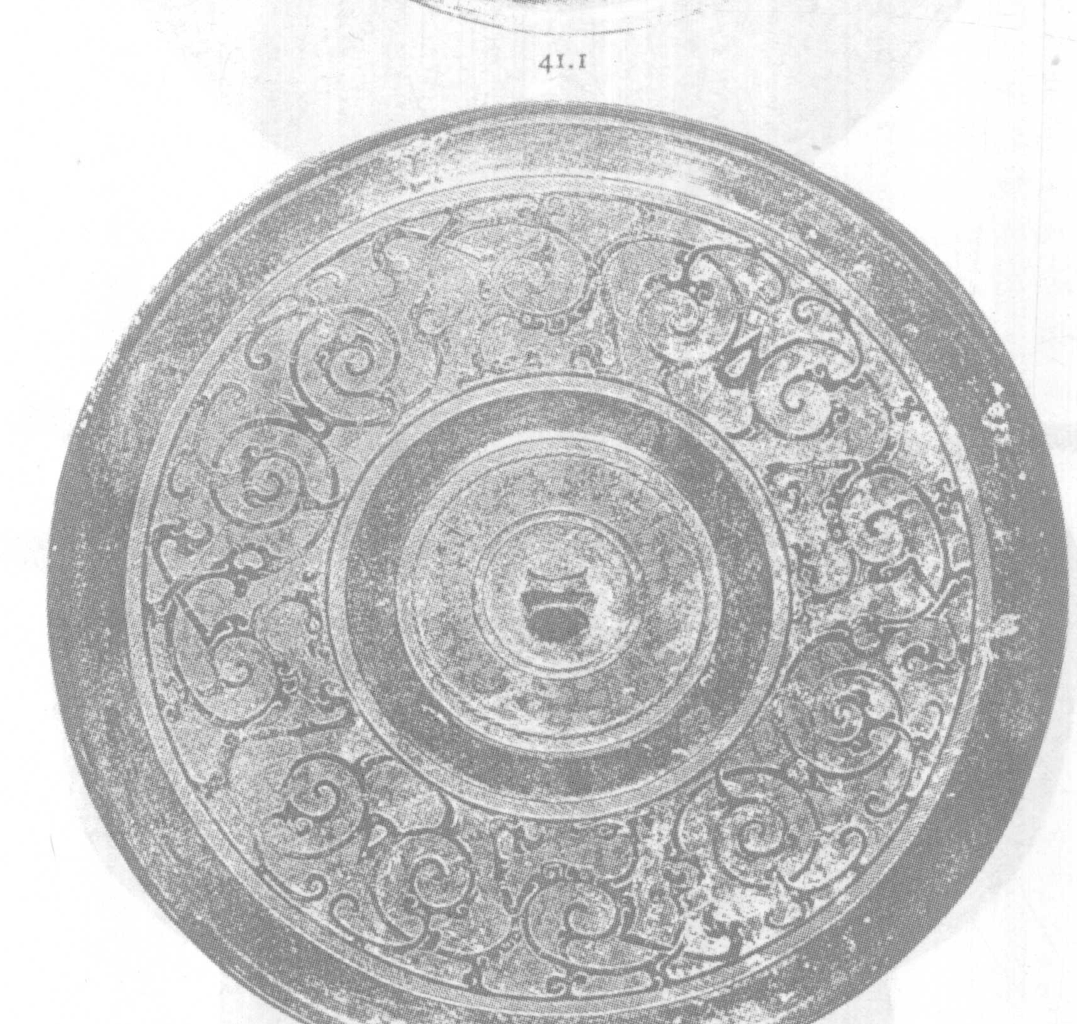
Late Chou dynasty. Height 26⅛ in. (.664 m.), interior minor axis 15⅜ in. (.391 m.), weight 138 lb. 8 oz.

(A. G. W., J. A. P., 1944.) The *chung* is a well-known type of which many examples were cast during the latter part of the Chou dynasty. It is characteristically ellipsoid in section. Approximately the upper two-thirds of the surface is frequently divided into four sections, each section being again divided into five registers of which the bottom, central, and top registers each contain a row of three bosses, in this case representing coiled serpents with feline heads. The other two dividing registers contain the characteristic interlaced design of the period which also appears on each side in the central portion of the lower third of the bell. There is a vertical space between the two sets of registers on either side, on which inscriptions sometimes appear, although there is none in this case. The suspending device on this bell is composed of two crested, parrot-beaked, wing-legged creatures, standing breast to breast with their heads turned backward and swallowing their own tails. The bell and all the designs thereon are cast with great clarity, and the object as a whole is of unusually fine quality. Three smaller bells apparently belonging to the same set are now in collections in this country. One belongs to the Art Institute of Chicago, and two are in the Winthrop collection of the Fogg Museum of Art, Cambridge, Mass.

Plate 36

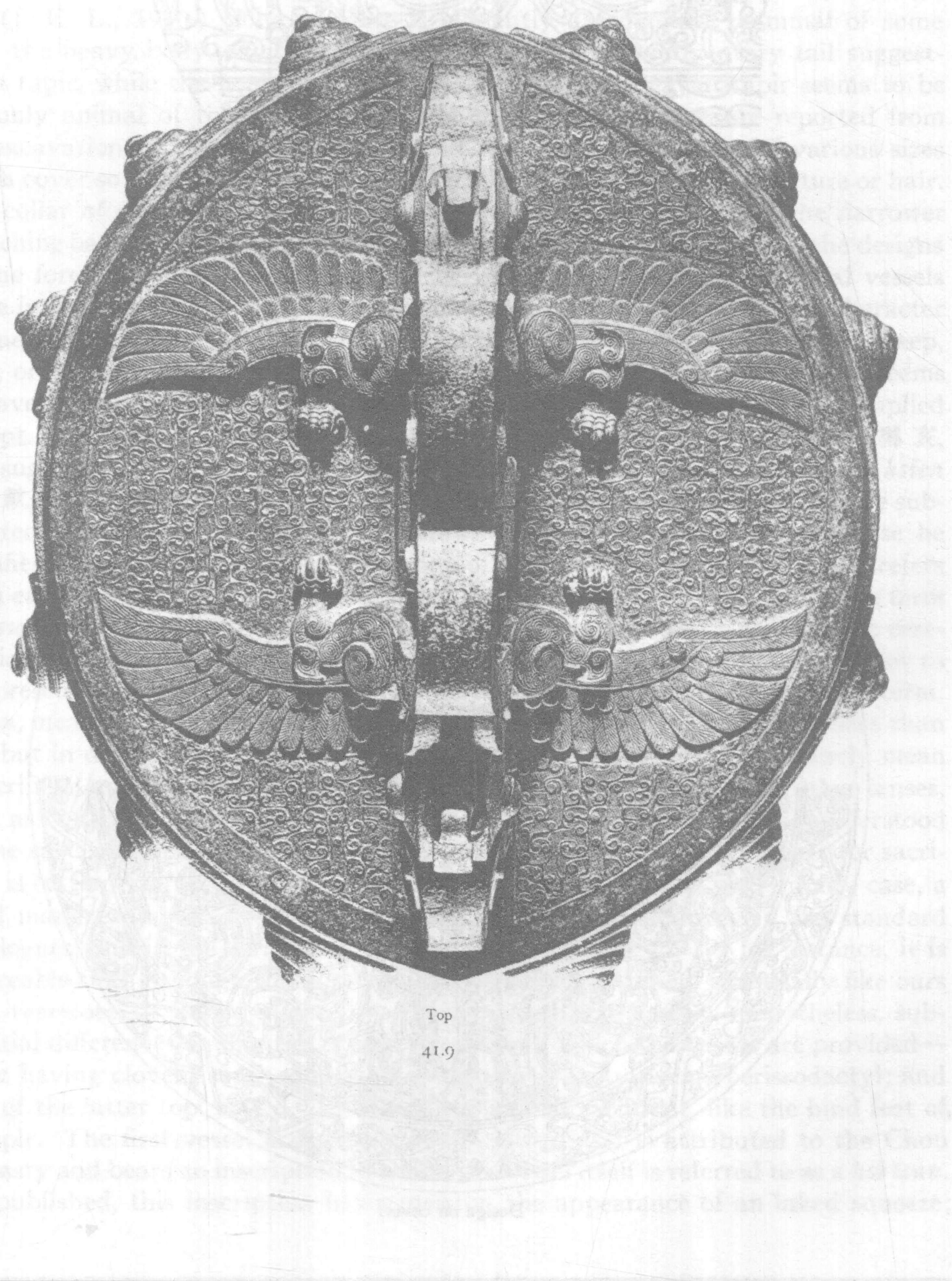


41.1



35.14

Plate 35



Top

41.9

PLATE 36

41.1 Mirror.

Patinated in shades of gray with slight incrustations of malachite and rust on the obverse. Decorated with casting in relief.

Chou dynasty. Diameter $6\frac{1}{4}$ in. (.164 m.).

(J. E. L., 1941.) Regarding this mirror, Mr. Cox[8], in his letter of October 3, 1940, says: "The mirror was excavated at Ch'ang-sha 長沙, Hunan Province, in July of 1937. The tomb was of deep shaft construction of the type briefly described in the brochure published by the Associates in Fine Arts at Yale University at the time of the exhibition of the Ch'ang-sha antiquities. The only other objects known to have been associated with it are two tanged, three-flanged arrow-heads in my collection. As for the decoration, this appears to be the only occurrence at Ch'ang-sha among some two hundred examples. The mirror bears No. 37.282 in the Ch'ang-sha collection."

The thin, flat body and reverted rim of this mirror, the slender, ribbed suspension loop, and the background design of curls, feathers, and dots are all characteristic of late Chou dynasty work (cf., e. g., **91**, Nos. 18 and 20, pls. 23 and 24), and with them the five large birds are entirely harmonious in execution. The birds themselves, however, are certainly unusual in mirror decorations. Though highly stylized, they seem to represent some sort of goose or swan (*hung* 鴻); but their exact symbolism is unknown to me. Apparently the mirror at one time lay on a finely woven textile, impressions of which can be seen in the gray patination of the obverse. The incrustations on this surface may well have come from other metal objects buried with the mirror, since the malachite does not seem to have arisen from the bronze of the mirror, while the reddish incrustation looks like iron rust.

(J. A. P., 1944.) On the basis of many years of experience in the field and in handling ancient Chinese bronzes of all kinds, Orvar Karlbeck has observed that pre-Han mirrors fall into two major groups and "that types common at Loyang 洛陽 are but rarely met with at Shou Chou 壽州 and vice versa." (**58**, p. 15.) He first drew attention to the Shou-chou group in 1926 (**23**), and his knowledge of provenance has been heavily drawn upon and fully acknowledged by Karlgren (**26**), where numerous examples of both types are illustrated.

This mirror is one of the types in the Shou-chou group, and similar examples are reproduced by Karlgren (op. cit., pls. 20–24). His number C74 is taken from Liang (**37**, vol. 1, fig. 33) and is markedly similar in respect to the main design of the five birds and the ground pattern. In his description, Liang also mentions thin reddish-brown corrosion.

Notes on Shou-chou appear in the above-mentioned writings of Karlbeck and Karlgren, and also in Yetts (**92**, vol. 2, p. 31). It is sufficient to note here that Shou-chou was the capital of the state of Ch'u 楚 during the last 18 years of its existence, 241–223 B. C., and that it had probably been a well-known center of Ch'u culture for some time, perhaps centuries, before that. Later on, in Han times, it was the seat of the princes of Huai-nan 淮南, the last of whom, Liu An 劉安 (better known as the patron under whose auspices was published the collection of

[8] John Hadley Cox, one-time resident of Ch'ang-sha.

Taoist writings known as the *Huai-nan-tzŭ* 淮南子), died in 122 B. C. The state of Ch'u, which came into being early in the seventh century B. C., occupied a large area in south-central China; and while its southern boundaries have not been determined with any degree of accuracy, they seem to have included part of northern Hunan. The T'ang dynasty commentators on the *Shih chi*, for instance, indicate that the river Mi-lo 汨羅 in which the celebrated Ch'u poet Ch'ü Yüan 屈原 drowned himself in the latter part of the fourth century B. C. was in the neighborhood of modern Ch'ang-sha before the *hsien* 縣 of that name was established in the Ch'in dynasty (**57**, ch. 84, 7a); and in the second century B. C. Ssŭ-ma Ch'ien 司馬遷 himself reports having visited the already famous site (op. cit., ch. 84, 14b) in the course of his extensive travels.

It is of interest, therefore, and entirely reasonable that this mirror of distinctly Shou-chou type should have been excavated almost 400 miles away at Ch'ang-sha, since both were within the confines of the great extra-Chinese state of Ch'u in about the third century B. C., when it was probably cast.

35.14 Mirror.

Patinated in mottled glossy black with areas of azurite. Decorated in sharply cast low relief.

Chou dynasty. Diameter $9\frac{3}{16}$ in. (.233 m.).

(J. A. P., 1944.) A mirror of the Shou-chou 壽州 type. See note on 41.4 and the E category in Karlgren (**26**, pp. 80–89, pls. 39–50). The main zone of decoration consists of four dragon forms in low, flat relief. These are so highly stylized that only the four heads at the inner edge of the field are clearly recognizable; the bodies, legs, and tails are to a great extent dissolved into arabesques symmetrically disposed over the field. The dragons are separated from each other by four teardrop-shaped figures with their points outward. The ground underlying this pattern consists of groups of spirals and triangles arranged in parallel lines.

This pattern appears again in the inner circle surrounding the knob-seat; and the two areas of similar ground pattern have in common a series of very thin raised lines crossing each other at right angles and at regular intervals. These lines are clearly not intended as part of the design for they sometimes disappear entirely; but they provide a clue to at least one part of the method by which these mirror designs were executed. They represent the lines of conjunction between contiguous impressions of a rectangular stamp which was used to fix the ground pattern on a master model from which the casting mold was made. The stamp used here was $1\frac{1}{32}$ in. x $1\frac{13}{32}$ in. in size, and had on it six rows of three spiral and six triangular elements each. The design is shown in the upper left panel of a series of eight typical ground patterns illustrated by Umehara (**74**, p. 23). The fact that the lines are in relief on the bronze point to the preliminary preparation of a model or positive of the proposed mirror, for had the stamp been applied to the material of the mold itself, the lines would have been in intaglio on the final product. It would seem that the first step was the preparation of a flat piece of some soft material, probably clay, of irregular shape on which a series of impressions were made with a carved or previously modeled stamp of the required design. The soft material was squeezed up slightly between impressions, producing these thin lines which then appeared in

intaglio on the mold and in relief again on the mirror. The precision with which this step was executed appears to have varied to some extent, but the marks of the stamp are clearly visible on a large majority of pre-Han mirrors. On those where they are not visible some retouching may have taken place on the model; and in some instances the traces are hidden in the overlying patterns. It may be noted, too, that the marks are more often found on Shou-chou mirrors than on those of the Lo-yang group, perhaps as indication that greater finesse was demanded by the house of Chou, even in its declining years, than by the rulers of the barbarian state of Ch'u 楚 (cf. note on 41.1).

With the ground pattern prepared in this way, it may be assumed that a circle was described determining the size of the mirror (cf. Umehara, op. cit., p. 13, fig. 6), and the concentric bands of various designs and the knob-seat were applied leaving the basic pattern to show through the interstices. The detailed procedure in these further steps is still obscure, but one interesting suggestion may be noted with respect to the outer rim. It may be that this part of the mirror was executed last of all and with a mold consisting of a separate piece from that on which the main design was prepared. Karlbeck has called attention to two mirrors[9] whose identity extends even to a crack in the original model which appears in the final bronze. In both cases the crack runs across the ground pattern and through the narrow inner rim but stops short there and does not appear on the broad concave outer rim, indicating that the model or mold for the latter was intact and was used in conjunction with a cracked model of the principal part of the mirror.

[9] Conversation in Stockholm, August 1938. One of the mirrors is in the collection of the British Museum and apparently is unpublished. The other may be the one in the Lagrelius collection, Stockholm, published by Karlgren (**26**, pl. 11, C16), though it is hard to tell from the reproduction. If this is the one, it would seem that the Lagrelius mirror was cast first, and that the model cracked further before the mold for the British Museum example was made

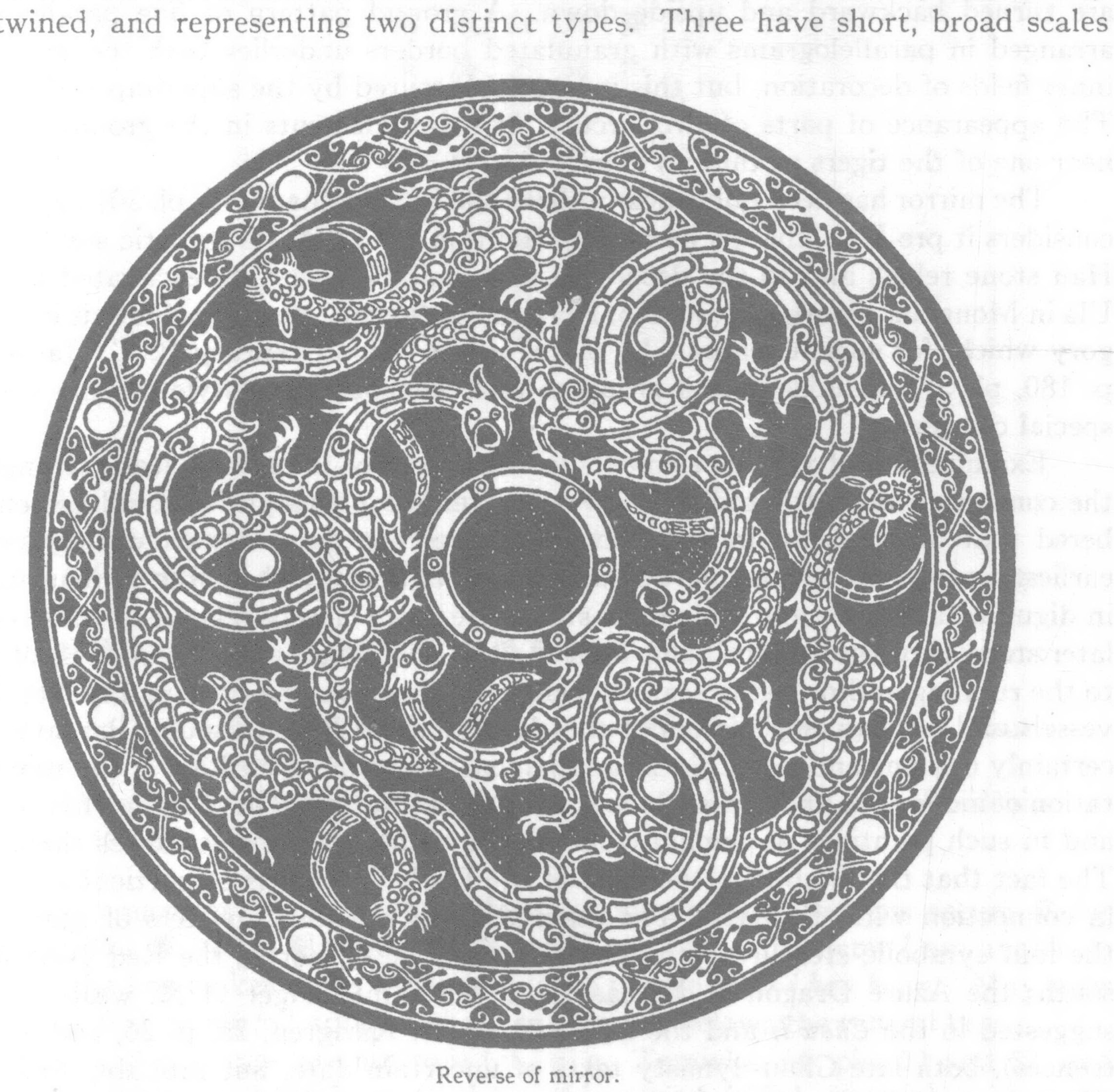
PLATE 37

36.3 Mirror.

Patinated in dull brown with areas of green and earthy incrustation. Decorated with gold and silver inlay.

Chou dynasty. Diameter $7\frac{11}{16}$ in. (.195 m.).

(J. A. P., 1944.) The reverse of the mirror is a single level surface with neither knob-seat nor rim raised above it. The small circular pattern surrounding the knob is of silver. In the main field of decoration are six fantastic beasts symmetrically intertwined, and representing two distinct types. Three have short, broad scales



Reverse of mirror.

of gold separated by threads of silver, and their golden feline heads face the outer rim. The other three have elongated silver scales separated by gold threads, and their birdlike heads of silver face the center. The outer band consists of one version of the volute and triangle pattern so characteristic of the period, and is executed in fine lines of silver and gold.

The mirror is made in two parts. The reverse, carrying the knob and the inlaid design, has a raised rim with beveled edge on its front side; and into the space thus

created the reflecting surface was carefully fitted. The reflector has been broken, and less than one-half remains in place, but this fact serves to show this construction the more clearly. The obverse is heavily incrusted with malachite and some azurite patination, and small mineralized fragments of silk adhere to the surface. The two-piece mirror was not uncommon in later times, and this method was used to make those so-called magic mirrors which reflect an image apparently not cast in relief on the back. They would, however, seem to be rare at this early date; and there is, at present, no indication of the reason this example was so made.

Umehara (**78**, pp. 32–33, pl. 49) publishes this mirror with the inference that it comes from the Han 韓 tombs at Chin-ts'un 金村. This would date it sometime between 450 and 230 B. C. Actually, the author fails to give any evidence of this provenance, and the mirror does not appear in Bishop White's extensive repertory of objects purporting to come from that site (**85**). For a just evaluation of the merits and defects of these two publications, see Karlgren (**28**, pp. 65–67; the problem of dating these finds is discussed in the same work, pp. 74–81). Under the circumstances, neither the omission by Bishop White nor the inclusion by Umehara is of decisive importance. When the mirror is considered on the basis of its decoration, and by comparison with the Chin-ts'un finds as a whole, the fifth to third century B. C. date seems perfectly applicable whether it actually came from the tombs of the princes of Han or not.

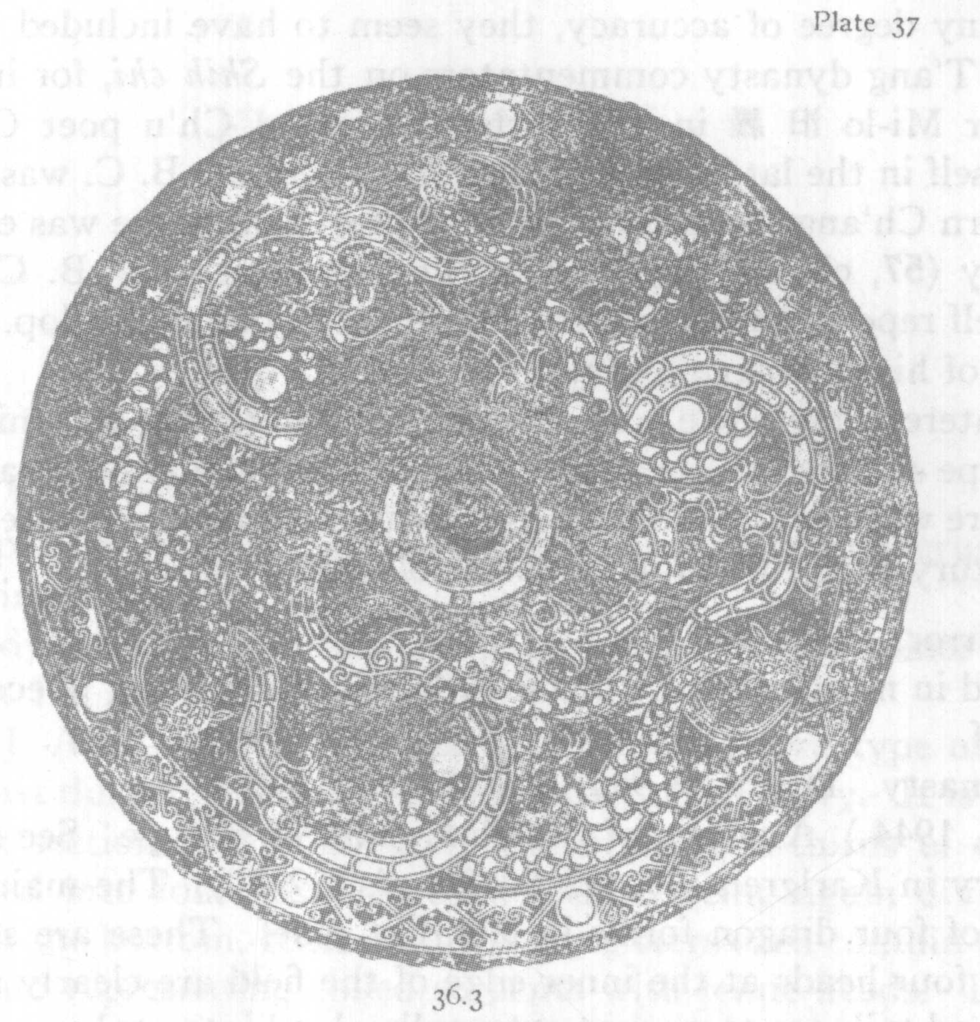
35.13 Mirror.

Patinated in mottled glossy black and gray with malachite incrustations. Decorated in sharply cast low relief.

Han dynasty. Diameter 7¼ in. (.184 m.).

(J. A. P., 1944.) This mirror is of the Shou-chou 壽州 type (cf. note on 41.1); it is unusual in that much of its decoration consists of human and animal figures in a suggested landscape setting. The main area is divided into four equal segments by four highly stylized groups of mountain peaks which rise from the inner border of the field almost to the outer. In each of the quadrants so created are eight humans and three animals; all four groups are identical. In the upper left, a standing man stretches out his left hand to pat the head of a tiger (?) lying in front of a tree. At the man's back is a tree, to the right of which stands another man in a respectful attitude facing a kneeling lute player. At the musician's left hand kneels another person with head tilted and hands upraised as though he were listening and keeping time to the music. To the right of this group is another tree beyond which stand two gentlemen in a conversational attitude. The left-hand figure stands slightly higher with head erect, while his companion, whose head is slightly inclined, stands at a lower level and may represent a person of lower rank. In three of the four sets of scenes there is a tree at this man's back. In the fourth it is missing. Beneath the feet of these persons are shown two further scenes. Seated on one of the lower boulders of the mountain mass at the left is a man who extends his left hand to pacify a leopardlike beast which plunges down from the small clump of rocks to the right (or has he thrust his hand into the beast's mouth?). Beyond this mass is a man calmly seated on the back of a tiger which appears to be leisurely stretching itself.

Plate 37



36.3



35.13

It is probable that these groups of human beings and animals represent well-known incidents in Taoist lore, though it is impossible to identify them with any degree of certainty. One group, however—that composed of a lute player and two other persons—strongly suggests the story of Po Ya 伯牙, his teacher Ch'êng Lien 成連, and his favorite listener Chung Tzŭ-ch'i 鍾子期. (Cf. 36.4 and 37.15.)

The knob is somewhat imperfectly cast but appears to represent the entwined tortoise and serpent, the Dark Warrior, *Hsüan-wu* 玄武, signifying the north. It rests on a quatrefoil in low relief and is surrounded by four dragons whose heads are turned backward and upside down. A ground pattern of fine parallel lines arranged in parallelograms with granulated borders underlies both the main and inner fields of decoration, but this is largely obscured by the superimposed figures. The appearance of parts of two circular or spiral elements in the ground pattern near one of the tigers at the rim is irregular.

The mirror has been published in three places. Umehara (**74**, pl. 30) apparently considers it pre-Han, though he draws attention (p. 32) to its stylistic similarity to Han stone reliefs and to the decorated materials of Han date excavated at Noin Ula in Mongolia. Karlgren (**26**, No. F17, pp. 92, 96–103, pl. 56) includes it in a category which, for cogent reasons, he places in the second century B. C. Janse (**18**, p. 180, pl. 57) includes it in a group of miscellaneous Huai-style objects without special comment.

Examination of various elements in the design of the mirror leads strongly to the conclusion that it is probably of early Han date, though it should be remembered that our present limited knowledge does not permit exact dating for the earliest appearance of any particular style. Tentatively then, the human figures in dignified attitudes and Chinese costume are more closely related to those of the later stone carvings at Wu Liang Tz'ŭ 武梁祠 and Hsiao-t'ang Shan 孝堂山 than to the running and prancing scantily clad creatures on some presumably late Chou vessels and on Lo-yang mirrors of the third century B. C., though the latter are certainly demons and not Chinese gentlemen. Even more striking is the representation of mountains and rocks which is not unlike that found in relief on Han pottery and in such paintings as remain from Han and the next few centuries thereafter. The fact that the knob is in the form of the Dark Warrior is of particular interest in connection with the date. The association of the four quarters of space with the four symbolic creatures—the Dark Warrior 玄武, north; the Red Bird 朱鳥, south; the Azure Dragon 青龍, east; and the White Tiger 白虎, west—though suggested in the *Chou li* and the *Li chi* 禮記 (cf. Karlgren, **25**, p. 26, and his references), both late Chou dynasty texts of uncertain date, but probably fourth or third century B. C. at the earliest, does not appear fully established until the second century B. C. with the publication of the *Huai-nan-tzŭ* 淮南子. Furthermore, no actual representations of the subject are known before Han times, when they appear in great numbers (see, for example, No. 37.30). Not only are they depicted on the mirrors, but when these are inscribed, the text frequently refers to these animals and to their functions as cosmic symbols, for what we look upon as the decorative elements on the mirror backs, especially in the Han and later examples, were all rich in symbolic meaning to the Chinese who made and used

them. The Dark Warrior of the north and the Red Bird of the south are described as controlling respectively the *Yin* 陰 and the *Yang* 陽 (Karlgren, **25**, p. 27, No. 89), the two basic forces whose harmonious interaction was considered to be at the very foundation of all existence. It is well known that the *Yang* stood for all that was bright, hot, dry, hard, active, and masculine, while the *Yin* represented their opposites, the dark, cool, damp, soft, passive, and feminine. In the absence of any confirming evidence, nothing definite can be said about the solitary presence of the Dark Warrior on this mirror. It is tempting to suggest, however, that with his relationship to the *Yin* clearly established, he is here given the central position on the nonreflecting, or dark or *Yin* side of the mirror, and is balanced by the brilliance of the reflecting surface which, when it gathers the heat and light of the sun, is the essence of *Yang*.

In advancing these tentative suggestions for both the date of the mirror and the symbolism of the knob, the fact that it is clearly of the Shou-chou type should be emphasized. As noted in connection with 41.1, Shou-chou, shortly after the middle of the second century B. C., was the capital of Liu An 劉安, the prince of Huai-nan, who assembled at his court the leading Taoist philosophers of the day. It was, therefore, the very center of the kind of metaphysical speculation that produced the elaborate cosmic symbolism represented here; and it does not seem at all inappropriate that this mirror should spring from that time, that place, and that body of thought.

Plate 38



37.30



39.38

PLATE 38

37.30 Mirror.

Patinated in glossy black with some areas of cloudy green on the face. Decorated with casting in relief.

Han dynasty. Diameter 5⅝ in. (.143 m.).

(J. A. P., 1944.) The decoration on the reverse is characteristic of that on a large group of Han mirrors. The large, plain, hemispherical knob is seated in a square whose corners are filled with scrollwork in linear relief. Outside this, in the main field of decoration, are eight small conical bosses, and four sets of geometric figures resembling the Roman letters T, L, and V, all symmetrically disposed. The latter have provided the common name "TLV mirror" for the type. Between these are arranged four pairs of mythical beasts among which can be distinguished the four traditional directional symbols: the Dark Warrior of the north, the Red Bird of the south, the Azure Dragon of the east, and the White Tiger of the west. Outside this field is a band of comb-tooth pattern. Again outside this, and upon the surface of the broad, thick rim, is a band of saw-tooth pattern and one of flowing lines making up the so-called "cloud pattern."

Many of these TLV mirrors carry inscriptions, and a large number of them are dated in the reign of Wang Mang 王莽 (A. D. 9–23). For a discussion of the probable dates of the type as a whole, see Karlgren (**26**, pp. 18–25, 113–114).

The TLV pattern, long a mystery to modern students, has in recent years been found to relate to the Chinese sundial. The question has been discussed, inter alia, by Karlbeck (**58**, pp. 27–30) and Yetts (**91**, pp. 116–165).

39.38 Mirror.

Patinated evenly in black. Decorated with casting in flat relief. Dedicatory inscription of 47 characters.

Han dynasty. Dated in correspondence with A. D. 174. Diameter 7³⁄₁₆ in. (.182 m.).

(J. E. L., 1940.) The inscription reads as follows:

熹平三年正月丙午
吾造作尙方明竟廣
漢西蜀合涑白黃自
刻無亟世得光明買
人大富長子孫延年
益受長樂未央兮

which may be rendered:

"In the Hsi P'ing reign (of the later Han dynasty), in the 3d year (A. D. 174), the 1st moon, and on the *ping wu* day, I made a shining Shang-fang mirror. From Kuang-han and Shu in the West I brought together

and refined the white and yellow (metal), and myself engraved it without stint. May you have splendor for generations. May he who buys (the mirror) have great riches. May you have descendants forever, length of years, increased longevity and happiness without end."

(J. A. P., 1944.) Mr. Lodge's study of this object was interrupted after he had translated the inscription, and he did not get the opportunity to conclude it. The following *chia chieh* 假借, usual in mirror inscriptions, occur in the text: 竟 for 鏡, 涑 for 鍊, 亟 for 極, 受 for 壽.

A rubbing of what is probably this same mirror is published by Lo Chên-yü (**43**, p. 1b). The diameter is the same, and the same minor flaws in the surface are apparent. The only uncertainty is in the relief decoration on the knob, and in this respect the rubbing is not clear. According to Lo, the mirror was then in the collection of a Mr. Ch'ien of Hsiang-yang 襄陽錢氏. It had previously been published by Liu Hsin-yüan (**39**, ch. 15, pp. 6b–7a, b). In that case, however, the reproduction was not clearly printed, and it would seem that the rubbing presented to Liu by the owner was also blurred. The result is a discrepancy in the reading of two of the characters that has persisted since that time in the literature on mirrors. The twenty-fourth and twenty-fifth characters are read by Liu as ○ 剡. Lo (**42**, p. 15a), reads them as 自利, and, in the presence of the mirror itself, we know this reading to be correct. Liu's erroneous reading has been perpetuated by Tomioka Kenzō (**66**, p. 65) and by Gotō Moriichi (**15**, p. 200). Umehara (**76**, p. 11) gives the inscription following Lo's correct reading but with question marks. He notes in the text that the two characters are unclear. Citing Tomioka, he says that while he follows Lo's interpretation, there is still some doubt. Finally, Karlgren (**25**, No. 210, pp. 64–65, 78) gives Lo's version of the text. He cites Tomioka and traces his error to Liu, evidently not realizing that all are talking about the same inscription. It is true, as he says, that the characters in Liu's reproduction are clearly 自利, but he fails to note that the poor quality of the reproduction as a whole and the general clarity of the characters strongly suggest that the latter have been retouched in places, and that this is the probable source of the error.

The 1st month of the 3d year of the Hsi P'ing reign of the later Han dynasty began on February 20, A. D. 174, according to the Julian calendar. In that month, there was no *ping wu* 丙午 day as the text would seem to indicate; the first day of that name actually fell on the 3d day of the 2d month (March 23, Julian). Karlgren (op. cit., p. 48) points out that this is not uncommon, and cites the *Lun hêng* 論衡, a text of the first century A.D., as authority for the fact that the *ping wu* day was considered particularly auspicious for the manufacture of mirrors. The cyclical character *ping* is associated in meaning with fire, and *wu* with noon and the midday sun. Hence the combination has magical properties appropriate to the sun-reflecting, heat-gathering character of mirrors.

PLATE 39

36.4 Mirror.

Patinated in black with spots of green and some corrosion on the rim. Decorated with casting in high relief. Dedicatory inscription of 44 characters.

Han dynasty. Dated in correspondence with A. D. 202. Diameter 5¼ in. (.134 m.).

(J. E. L., 1936.) The dedicatory inscription is in verse and reads as follows:

吾作明竟幽涑宮三商
周克容象五帝天皇
白牙單○琴黃帝除兇
朱鳥玄武白虎青龍
建安七年造作君宜高官

"I made this shining mirror. In secret I refined the *kung* element (earth) and the three *shang* elements (metals).

All around I sculptured images; the Five Emperors, the Sovereign of Heaven,

Po Ya playing . . . the lute, the Yellow Emperor dispelling malevolent influences,

The Red Bird, the Dark Warrior, the White Tiger and the Azure Dragon.

Done in the 7th year of Chien An (A. D. 202). May your Lordship attain to high office."

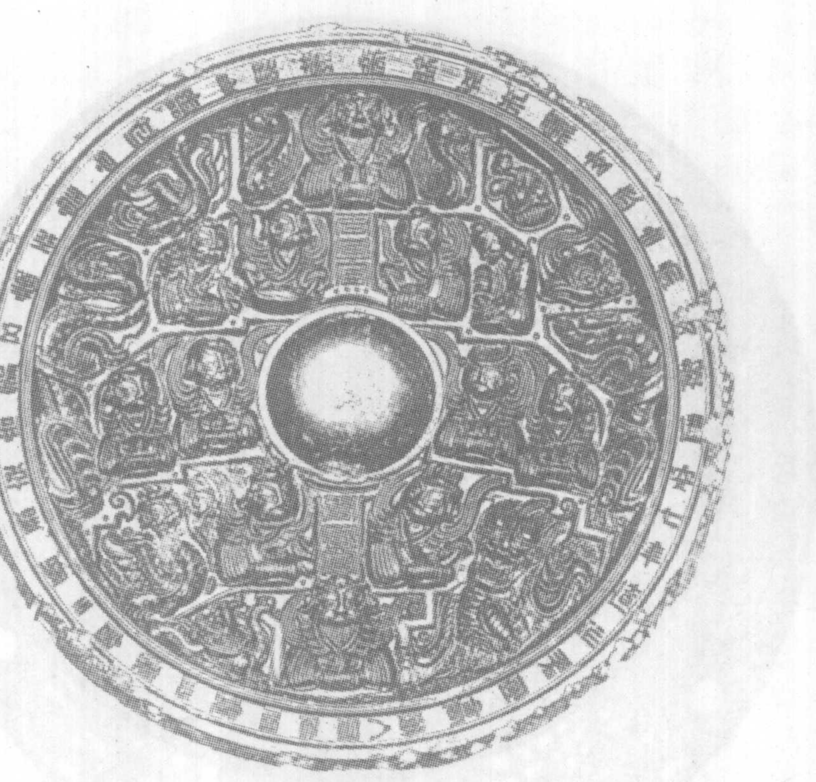
In the course of this text, the following common substitutions occur: 竟 for 鏡; 涑 for 鍊 or 煉; 克 for 刻; 白 for 伯; 單 for 彈 *t'an*. One character I am unable to read, but the line makes sense without it. The phrase *chün i kao kuan*, "May your Lordship attain to office" appears above, and again below, the central boss.

Mirrors of this type are not rare (cf., e. g., Tomioka, **66**, pls. 11 and 32, and p. 62); but the type itself is unusual for this period (third century) in that the decoration is presented as a single perpendicular composition instead of a circular sequence. The 22 human and animal figures represented are symmetrically arranged in a number of compartments formed by meandering bars which seem to fulfill no other function (cf. 37.15). Of the 14 human figures, no more than 8—possibly only 7— purport to be named in the dedicatory inscription; of the 7 animal figures, 4 are named in the inscription; while to the one monster—a bird with 2 human heads—as also to the remaining human and animal figures, the inscription makes

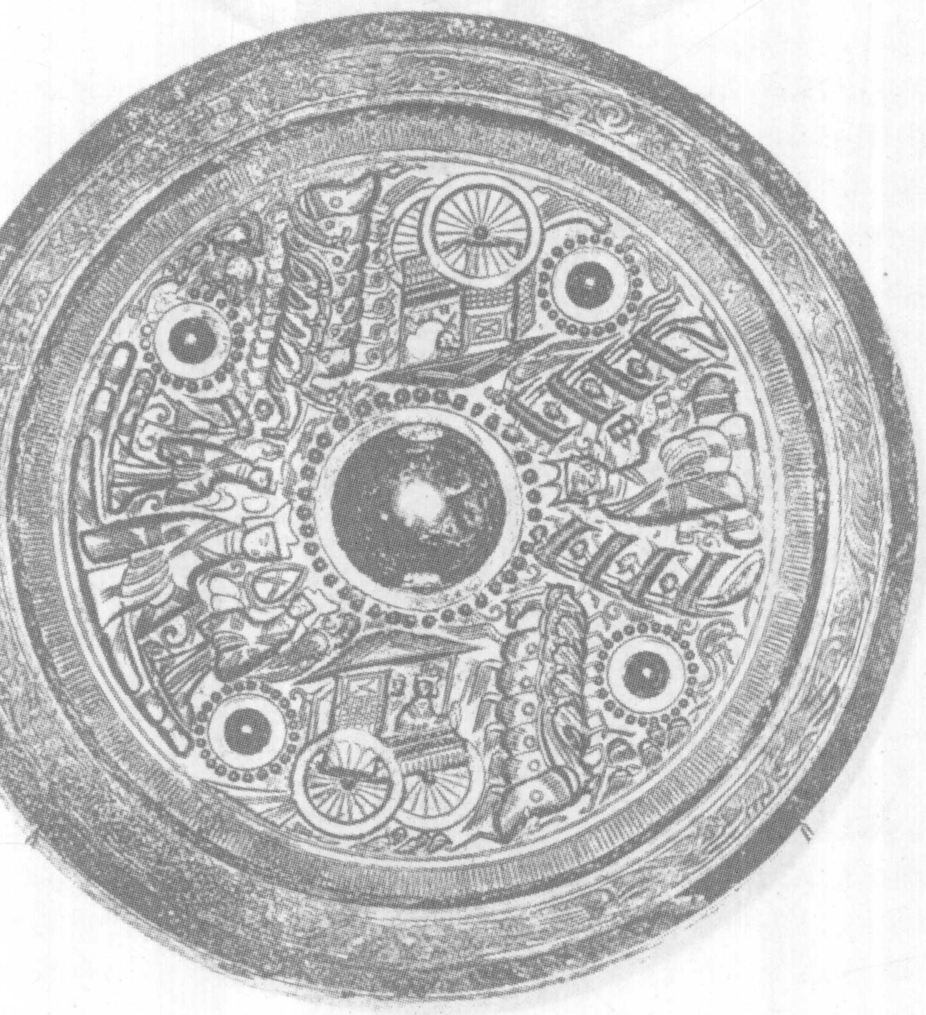
no specific reference at all. Even among the figures named, however, less than half can be definitely identified with the figures represented.

The Five Emperors make up one of the two numerical categories between which the Chinese traditionally divide their legendary rulers: the other is that of the Three Sovereigns 三皇. The total number of rulers involved, however, may be greater or even less than the sum of the two categories, because each category has been differently constituted by different historians. Thus, for example, the *Li chi* 禮記 (chap. 月令) (**36**, vol. 27, pp. 249–310) lists the Five Emperors as T'ai Hao (Fu Hsi) 太昊 (伏羲), Yen Ti (Shên Nung) 炎帝 (神農), Huang Ti 黃帝, Shao Hao 少昊, and Chuan Hsü 嵩頊, whereas the *Shih chi* (**9**, vol. 1, pp. 25–96) lists them as Huang Ti, Chuan Hsü, K'u 嚳, Yao 堯 and Shun 舜. Meanwhile, the Three Sovereigns are usually listed as T'ai Hao, Yen Ti, and Huang Ti; but the eighth-century historian Ssŭ-ma Chêng 司馬貞, in his *Annals of the Three Sovereigns* 三皇本記, supplementing the *Shih chi*, lists them as T'ai Hao (Fu'Hsi), Nü Kua 女媧, and Yen Ti (Shên Nung), thus completing the *Shih chi* list of legendary rulers without duplication in the case of Huang Ti (**9**, vol. 1, introduction, pp. ccxiv–ccxv; also pp. cxc–cxcii). He says, furthermore, that Yen Ti (Shên Nung) had "the body of a man and the head of a bull." On the next page, however, he calls attention to another and perhaps earlier tradition (**9**, vol. 1, pp. 13, 17ff.) that the Three Sovereigns were the "Sovereigns of Heaven" 天皇, of whom there were 12; the "Sovereigns of Earth" 地皇, of whom there were 11; and the "Sovereigns of Man" 人皇, of whom there were 9. Ssŭ-ma Chêng himself makes it quite clear—as also does the Commentary on his text—that he was discussing three groups of sovereigns, each group consisting of a definite number of individuals; but it appears that both before and since his time this point has been otherwise understood. The crux of the matter seems to lie in the true meaning of the phrases 天皇, 氏十二頭, and 人皇九頭, which Ssŭ-ma Chêng uses in the sense that the number of the Sovereigns of Heaven was 12 persons (literally "12 head") and the number of the Sovereigns of Man was 9 persons (literally "9 head"), as is made evident by his subsequent reference to these groups as 兄弟十二人 "12 brothers" and 兄弟九人 "9 brothers," respectively (**9**, vol. 1, pp. 18–19). On the other hand, Pelliot (**52**, pp. 455–456) prefers to translate 人皇九頭 "l'Empereur de l'Homme, à neuf têtes" . . . "mot à mot 'les neuf têtes de l'Empereur de l'Homme,' " and supports his preference by quoting chapter and verse; he has, moreover, published (**51**) a bronze plaque of the Six Dynasties showing in perforated relief a dragonlike quadruped with multiple human heads labeled "Sovereign of Heaven."

Bearing these literary references in mind, and turning again to the mirror decoration, it will be noticed that the personage seated immediately east (i. e., to the right) of the central boss has a pair of horns, indicating that he may be intended to represent Yen Ti (Shên Nung), the second of the Five Emperors listed in the *Li chi*. Perhaps there is a chance, too, that the winged monster with 2 human heads (southwest of the central boss) may have been meant to suggest the 12-headed Sovereign of Heaven; perhaps, also, the term 天皇 may have been used here to designate the reigning Emperor (Hsien Ti 獻帝 A. D. 181–234), although, indeed, I do not know how old this use of the term may be. The person seated immediately



36.4



37.14

to the left of the upper vertical inscription seems to be Po Ya 伯牙 the lute player; one of the two figures seated on either side of him may be his teacher Ch'êng Lien 成連; while the figure shown in profile at the extreme right of the same row seems to be Chung Tzŭ-ch'i 鍾子期, Po Ya's favorite listener (see 35.13 and 37.15, and Umehara, **80**, vol. 4, pl. 95b, where the lute is better represented). Of the other personages, none can be even tentatively identified; but some of the animals are recognizable. Thus, northwest of the central boss is the Red Bird; southwest, the Dark Warrior in the form of a tortoise with, curiously enough, a human figure on its back; southeast, the White Tiger; due east, a dragon, and due west another dragon—one, no doubt, the Green Dragon; the other, probably, the Yellow Dragon. These animals symbolize the "Five Palaces" or regions of the sky (**9**, vol. 3, pp. 339ff.), respectively: south, north, west, east, and center. (Yetts, **92**, vol. 2, pp. 33ff., has discussed this symbolism admirably and at length; also in **91**, pp. 120ff.)

(J. A. P., 1944.) For further information on the Five Emperors and their significance on mirrors of this type, cf. Hall (**16**, pp. 16–23).

37.14 Mirror.

Patinated in dark olive green, bluish gray, and patches of light green. Earthy adhesions. Decorated with casting in relief.

Han, Wu, or Chin dynasty. Diameter 8¼ in. (.210 m.).

(J. A. P., 1944.) The smooth, almost hemispherical knob is surrounded by a slightly concave rim outside of which are 35 small conical bosses. The main field of decoration is divided into quarters by 4 large nipples of similar shape, each with its concave rim and surrounded by circles of 21, 22, 23, and 24 small conical bosses respectively. The pictorial part of the design is in sharply cast relief. On opposite sides of the knob are two covered two-wheeled carts; one, with a single passenger, is drawn by a team of seven horses, the other, with two passengers, has a team of six. In the quarter in front of the six-horse team is seated a single personage to whom eight kneeling demonlike creatures are making offerings or obeisance. Of these, the four on the right have beards while those on the left are beardless. Of the bearded group, the second from the bottom appears to be holding a cylindrical cuplike vessel on a two-legged stand. The central figure wears a three-pointed hat, or crown, and is distinguished by his prominent cheekbones, bushy eyebrows, moustache, and whiskers. Diametrically across the mirror is a seated figure flanked by two standing attendants on a smaller scale. The right-hand attendant holds a large bud-shaped object (a vessel?) on a two-legged stand; and behind the left-hand attendant stands a single one of the thin demonlike figures mentioned above. In the remaining space are two birds in outline, an unidentified beast near one of the bosses, and two parrots, one behind the top of each cart. Encircling the whole of this field are two thin lines in relief and a band of comb-tooth pattern. On the thick sloping rim is a band of highly stylized animal forms in low, flat relief. The reflecting face of the mirror is convex.

Many mirrors of this type have been published, the most extensive selection by Umehara (**82**) who groups his examples on the basis of reported finds in the Shao-hsing 紹興 region of Chekiang Province. They are often called Yüeh 越 mirrors, after the ancient name of that part of China. The 73 mirrors in this work

fall into 2 well-defined groups; 59 have the main field of decoration quartered by 4 large nipples as on the mirror here under discussion; 14 are treated otherwise. Of the latter group, one has five nipples of the same type, two are decorated in such a way that all the figures appear right side up at once as on our 36.4, and the rest have zones of semicircles and squares in relief projecting inward from the thick outer rim as on our 37.15. Of this entire group 12 mirrors carry dated inscriptions, and none of those are of the 4-nipple type. A rapid survey of other works including mirrors of Yüeh type seems to indicate that so far as is known none of the dated mirrors is decorated with four nipples quartering the principal field (Lo, **43**; Tomioka, **66**, **67**; Gotō, **15**; Umehara, **75**, **76**, **77**; and Karlgren, **25**). The latter, though not illustrated, gives texts and translations of many inscriptions from mirrors illustrated in the foregoing works. In spite of the fact that all the dated mirrors appear to be of the square-and-semicircle, the single-orientation, and other types than those with four nipples, there seems to be no reason not to include the latter type in the Yüeh group both in time and in place. It may be noted in passing that among the dated examples the reign names are most often those of late Eastern Han, Wu, Western Chin, and Eastern Chin, thus placing them for the most part in the late second, third, and early fourth centuries A. D. (cf. **7**, where a few examples are noted).

The pictorial relief decoration on the Yüeh mirrors characteristically includes the figures of legendary personages, deities, genii, and fabulous and symbolic birds and animals. Not infrequently these are identified by characters appearing beside them or else in the main inscription, if there is one (cf. 36.4, 39.52). Among these perhaps the most often mentioned are Hsi Wang Mu 西王母, Tung Wang Kung 東王公, and the symbolic beasts of the four cardinal directions; but occasionally figures of a more historical nature appear (cf. 39.52), and there are some instances where these have particular local significance for the Yüeh region (cf., e. g., Yetts, **93**, where the second of the two mirrors shows the King of Yüeh, his general and counsellor Fan Li 范蠡, two of his ladies, the King of Wu, and The Loyal Minister Wu Tzŭ-hsü 忠臣伍子胥).

As there are no characters on the present mirror, the identification of the personages represented must remain tentative. There is, however, enough comparative material available to support the suggestion that the two principal figures are Hsi Wang Mu and Tung Wang Kung. In Umehara's repertory of Yüeh mirrors cited above (**82**), there are, on mirrors of this 4-boss type, 13 instances of figures labeled Hsi Wang Mu, and 14 labeled Tung Wang Kung, and in 4 cases (6, 16, 26, 61) the latter wears a 3-pointed crown like that on our mirror. The other main elements of the design—the covered carts drawn by teams of horses of varying numbers and the small demonlike figures—are common on these mirrors. The two parrots, however, are unusual. While birds of various kinds are often included, this particular species seems to be rare in mirror decoration. Whether or not they have any particular significance is uncertain, but it may be worth noting that pairs of such birds, incised in the clay, form one of the characteristic decorations on the Yüeh ceramic wares that come from the same region.

PLATE 40

37.15 Mirror.

Patinated in black and gray with small, sparse areas of pale green. Decorated with casting in relief. Dedicatory inscription of 56 characters.

Han, Wu, or Chin dynasty. Diameter 5⅙ in. (.135 m.).

(J. E. L., 1938.) The inscription in verse appears on the 14 squares, 4 characters to each square, and is as follows:

大 安 子 服 百 周 吾
吉 定 孫 者 身 刻 作
陽 所 番 公 擧 無 明
逐 爲 昌 卿 樂 祉 竟
其 舒 是 敬 衆 配 幽
師 道 從 奉 神 像 湅
命 不 富 賢 見 萬 三
長 窮 貴 良 容 疆 商

"I made the shining mirror; in secret I refined the three *shang* elements (metals);

All around I sculptured without stopping (?); I suitably depicted the ten thousand regions.

May everyone be happy; may all divinities make their ways manifest;

May the one who carries (this mirror) be a Noble or a Minister: I respectfully offer it to the wise and the good.

May your sons and grandsons be many and prosperous; may your clan be rich and famous;

May you be at peace in whatever you do; may the open road have no ending;

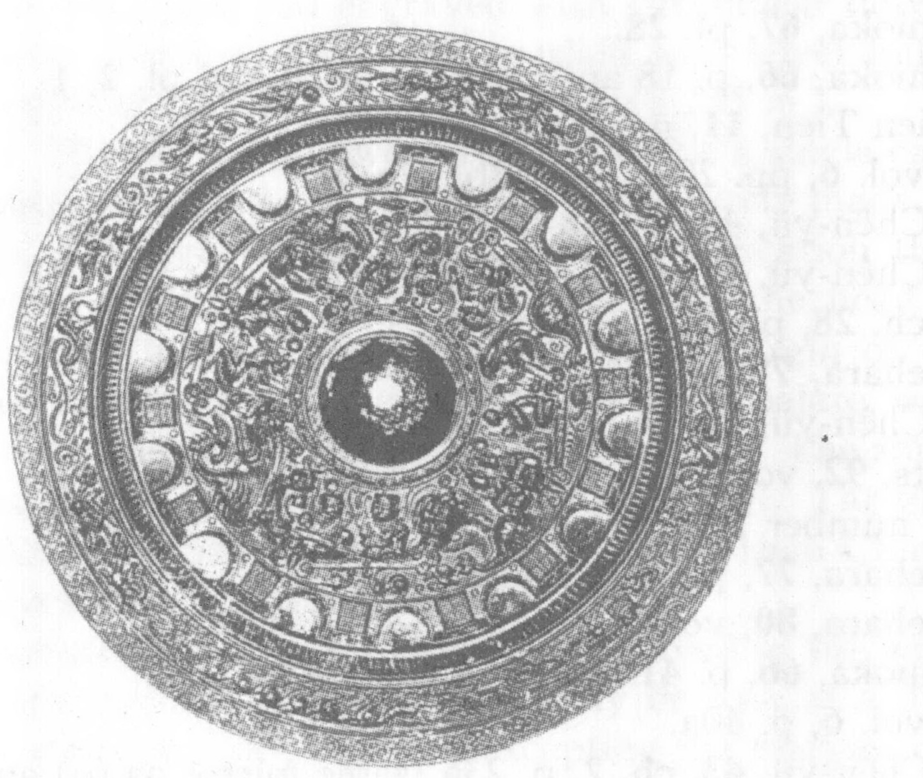
May there be great good fortune to come; may the (mirror's) maker live long."

In this text the following common substitutions occur: 竟 for 鏡, 彊 for 疆, perhaps 是 for 氏, 陽 for 祥. Regarding the character which I have read *chih* 祉, see Karlgren, **25**, pp. 56–57; but my reading is surely not impossible—the radical, indeed, being obvious; while in treating 祉, "happiness," as a substitute for its homophone, 止, "to stop," I have done nothing that is not often done by the writers of these mirror inscriptions.

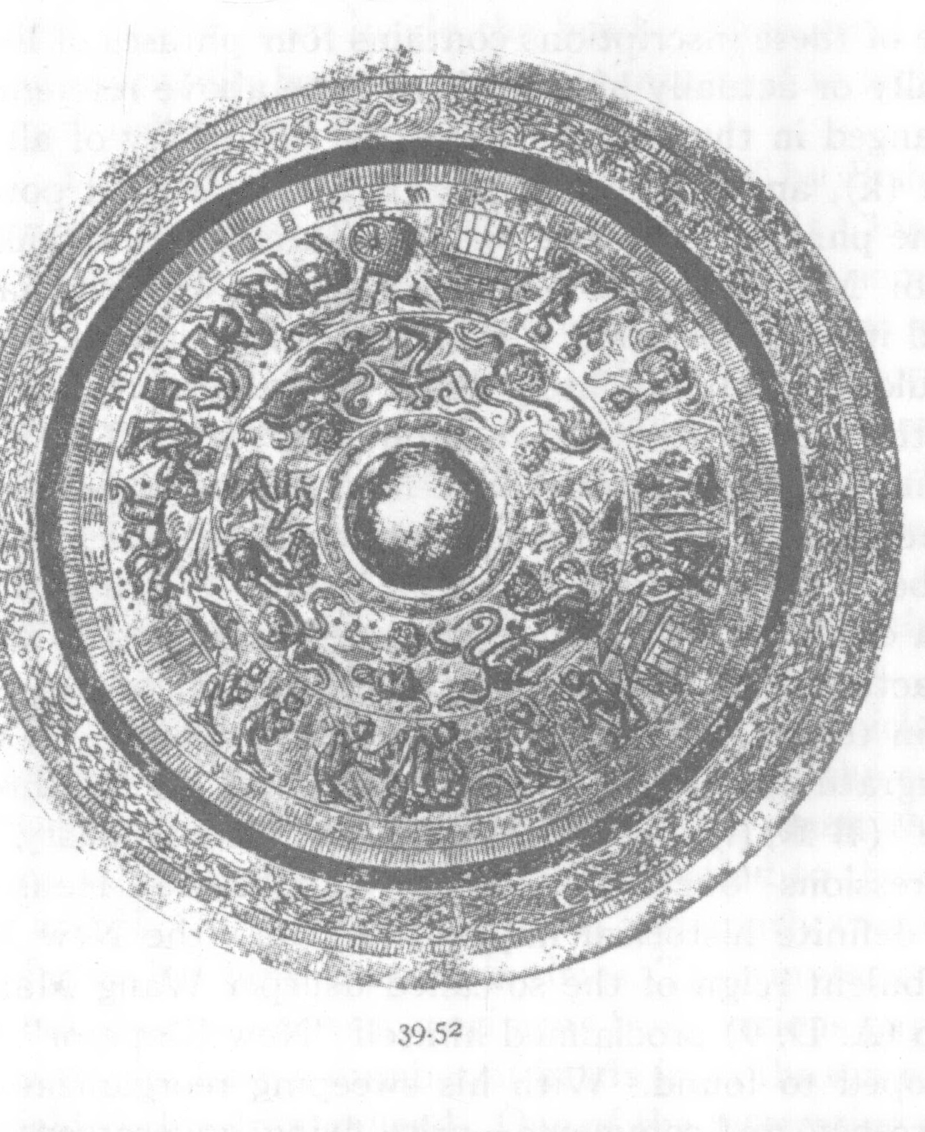
This zone of semicircles and squares characterizes a large class[10] of mirrors which were made, for the most part, during the four centuries between A. D. 100 and 500. Many of them are dated (e. g., **66**, pls. 28, 29, 33–40), and from the information thus afforded it is evident that the third century was the period of their

[10] The Yüeh group. Cf. 37.14, pp. 76, 77. J. A. P.

Plate 40



37.15



39.52

most numerous production: certainly more of them have survived from that century than from any other. But apart from the alternate semicircles and squares, mirrors of this class, with relatively few exceptions (e. g., Tomioka, **66**, pls. 76, 1; 81; 82, 1, 2, 3; 87, 1), resemble one another closely in general construction and in the subjects, arrangement, and execution of their decoration.

The condition of the present example is so nearly perfect that the rich, spirited, and beautifully wrought decorations can be seen as well now as when the mirror was made. Among the legendary personages and supernatural animals in the broad, inner zone, it is easy to recognize Po Ya 伯牙 (700 B. C. or somewhat later), a famous player on the lute (琴), (cf. 36.4 and 35.13) in the Ch'u 楚 state, here flanked on the right by his teacher, known as Ch'êng Lien 成連, and on the left by his favorite listener, Chung Tzŭ-ch'i 鍾子期. According to *Lü shih ch'un ch'iu* (**46**, ch. 14, p. 4b): "Po Ya played on the lute; Chung Tzŭ-ch'i listened to him. Now as (Po Ya) played, his earnest thought was of Mount T'ai. Chung Tzŭ-ch'i said: 'What skillful lute playing! How sublime! It is like Mount T'ai.' After a moment's interval, (Po Ya's) earnest thought was of surging waters. Chung Tzŭ-ch'i again said 'What skillful lute playing! How grand! It is like surging waters.' When Chung Tzŭ-ch'i died, Po Ya broke his lute, cut the strings, and never again in all his days played on a lute, believing that there was no listener left in the world for whom it would be worth while to play." Ch'êng Lien is said to have transported his pupil to the Isles of the Immortals 仙島 where Po Ya's technique was perfected. Chung Tzŭ-ch'i was a woodcutter by trade; his name is now used to denote a connoisseur of music. To the right and left of these three worthies is, respectively, one of the four auspicious animals; and beyond each of these again, in either direction, is a group of personages whom I cannot surely identify. Next comes the other pair of auspicious animals; and in between them a pair of smaller, dancing animals completes the circuit of this zone of decoration. Winding its way throughout the design is a zigzag made up of straight bars each of which terminates in a cluster of two or three spirals and thus joins the next bar end to end in at least one direction. Four of these bars are held, respectively, in the mouths of the four large animals, and the whole arrangement—common enough among mirrors of this type—appears to serve merely as a means of dividing the decoration into four more or less symmetrical sections. Functionally, therefore, this zigzag seems to be comparable with the more elaborate device by which the decoration on mirrors like our 36.4 is divided into compartments. Excepting the four large animals, all the principal figures in the design are above the bars of the zigzag; but below them are a pair of fishes, a tortoise, three birds, and an unidentifiable quadruped. Very likely the fishes, then as now, symbolized union, marriage, fecundity, etc.: at all events, Lo Chên-yü (**42**, p. 12a, 1–10) has published a mirror inscription in which a fish (or fishes) characterized as "divine" (神魚) is mentioned among other animals depicted on the mirror; but since there is no illustration, it is impossible to tell how many fishes are shown (cf. 39.52). The tortoise and one of the birds may, of course, be the familiar Dark Warrior and Red Bird (cf. 36.4) commonly mentioned in mirror inscriptions; but I cannot be sure. The stream of fabulous animals, birds, and

sprites racing clockwise around the narrower outer zone of decoration is particularly spirited.

39.52 Mirror.

Patinated in black, gray, and green with earthy incrustations. Decorated with casting in relief. Dedicatory inscription of 43 characters; identifying characters interspersed in decoration.

Han, Wu, or Chin dynasty. Diameter 6⅞ in. (.175 m.).

(J. E. L., 1940.) The dedicatory inscription is in verse and reads as follows:

告 長 風 胡 多 田
傳 保 雨 虜 賀 氏
後 二 時 殄 國 作
世 親 節 威 家 竟
樂 得 五 天 人 四
無 天 穀 下 民 夷
亟 力 孰 復 息 服
兮

"Mr. T'ien made this mirror. The barbarians of the four quarters have submitted:

Our Country is to be warmly congratulated; the people are at rest.

The Hu slaves are rooted out and exterminated; the Empire is restored.

Wind and rain are seasonable and moderate; the five grains are ripening.

May both parents be long preserved; may they receive strength from Heaven;

May (the mirror) be handed down to inform future generations; may there be joy without end!"

In the course of this text, the following common substitutions occur: 竟 for 鏡, 威 for 滅, 孰 for 熟, 亟 for 極.

Practically every phrase in the foregoing is a formula, and mirror inscriptions composed of these formulae—with occasional additions or subtractions—are of frequent occurrence. In such inscriptions, many of the set phrases are mere generalities; others are somewhat vaguely or only potentially historical; while in a few cases accurate dates are added. The generalities require little comment; but it is, perhaps, worth noting that the phrases "Wind and rain are seasonable and moderate; the five grains are ripening" occur in the *Huai-nan-tzŭ* 淮南子, ch. 6 (according to Karlgren, **25**, p. 38). The two accurately dated inscriptions of this sort known to me have been published by (a) Umehara (**76**, p. 43) and (b) the 1st Supplement to it (p. 465 and pl. 2, 1); both are dated in the 3d year of the T'ai K'ang 太康 reign

of the Western Chin dynasty, i. e., A. D. 282. In addition, a good many closely similar mirror inscriptions have been published as follows:

(c). Umehara, **82**, Nos. 15, 16, 20, 25, 34, 40, 49, 59.
(d). Umehara, **75**, p. 179.
(e). Tomioka, **67**, pl. 28.
(f). Tomioka, **66**, p. 18 and pl. 2, 5; p. 20 and pl. 2, 1.
(g). Ch'ien Tien, **11**, pp. 8–9.
(h). **14**, vol. 6, pp. 20b, 21a, 23b, 27a-b.
(i). Lo Chên-yü, **42**, p. 11a-b.
(j). Lo Chên-yü, **43**, ch. 2, pp. 21a, 22b.
(k). **84**, ch. 28, p. 32; ch. 29, p. 6.
(l). Umehara, **77**, pl. 46, 2.
(m). Lo Chên-yü, **43**, ch. 2, pp. 17b and 20b.
(n). Yetts, **92**, vol. 2, pl. 13, B. 23, and pp. 55–56.
(o). Our number 11.98.
(p). Umehara, **77**, p. 13 and pl. 22.
(q). Umehara, **80**, vol. 5, pl. 61.
(r). Tomioka, **66**, p. 41 and pl. 3 (see (s)).
(s). **14**, vol. 6, p. 40a.
(t). Lo Chên-yü, **43**, ch. 2, p. 23a (same mirror as (q) and (b)).

Every one of these inscriptions contains four phrases of like import which are either potentially or actually historical, and the above references, (c) through (t), have been arranged in that order. Thus, the historicity of all the crucial phrases in (c) through (k), and (l) through (o), is no more than potential, while in (p) through (t), one phrase—the same one in each case—is actually historical though not precisely so. Many of these inscriptions begin with the name of the maker of the mirror, and it is obvious that if this individual could be identified, the date of the mirror could be approximately fixed. Furthermore, the two phrases "The barbarians of the four quarters have submitted" and "The Hu slaves are rooted out and exterminated" can hardly have much chronological significance in themselves, since the Chinese were forever at more or less violent odds with their "barbarian" neighbors. If, however, one of the other two phrases should give some suggestion of a date, then the two just quoted may tend to confirm it or even to fix it more exactly. This possibility is illustrated by one of the three variations which appear in the fourth and last of the crucial phrases in which the maker of the mirror congratulates either "our Country" (國家, (a) through (k)), or "our Prince's House" (君家, (l) through (o)), or "the New Dynasty" (新家, (p) through (t)). The expressions "our Country" and "our Prince's House" convey, as far as I can tell, no definite historical implication; but "the New Dynasty" doubtless means the turbulent reign of the so-called usurper Wang Mang 王莽 (33 B. C.–A. D. 23), who (A. D. 9) proclaimed himself "New Emperor" 新皇帝 of the New Dynasty he hoped to found. With his sweeping reorganization of the Empire's agriculture, currency, and commerce—price-fixing, government loans, "ever-normal

granary," etc.—the policies of our own "New Deal" have much in common. That his ruthless prosecution of these reforms finally cost Wang Mang his head is, perhaps, beside the point. *Absit omen*! History credits him with the immediate abolition of slavery—a laudable accomplishment if, indeed, the fate of the Hu slaves, as described in these mirror inscriptions, does not indicate his preferred method of bringing it to pass. Early in his reign, too, he waged successful war upon "the barbarians of the four quarters" who "submitted" at the time, but later retaliated, in the days of his failing power, and contributed importantly to his downfall. On this evidence, therefore, it seems reasonable to assign New Dynasty mirror inscriptions of this type to the first few years of Wang Mang's reign. Thus, if the dates approximately or exactly fixed by (p)–(t) and (a)–(b) be regarded as terminal, it would appear that the respective dates of the whole series, (a)–(t), must fall between A. D. 9 and 282—a span of 273 years which included the last two reigns of Western Han, the whole of Eastern Han, the Three Kingdoms (Minor Han, Former Wei, and Eastern Wu), and the first reign of Western Chin. At all events, I have not yet found another example of the inscription which can be surely dated either earlier or later.

Although it can hardly be said that this inscription was ever preferably associated with any special type of mirror decoration, nevertheless it is true that a majority of the surviving mirrors which bear it are decorated with central designs executed in massive relief—either somewhat flattened, like our 37.14, or high and fully rounded, like our present example. On the other hand, some—though not all—of the New Dynasty examples, e. g., (p), (r), and (t), are of the so-called TLV type, with central designs executed in linear relief, like our 17.194; but there is no later example of this type in the series. Current throughout the whole group, however, are the designs executed in high, fully rounded relief, while those executed in somewhat flattened relief seem (cf. (c)) to have been more or less confined to the period of the Three Kingdoms, although this latter deduction may be based upon nothing more substantial than the chances and vagaries of survival. At all events, most of the designs executed in massive relief are devoted to mythological and legendary subjects, such as fabulous creatures or Hsi Wang Mu 西王母 and Tung Wang Kung 東王公, etc.; but there are at least three of the series on which historical subjects have been illustrated, two of them—(c) No. 49 and (g)—in flattened relief and one—our present example—in high, rounded relief.

For example, the subject of (c) No. 49 is taken from the life of Wu Yüan 伍員 of Ch'u 楚, better known as the "loyal Minister" Wu Tzŭ-hsü 忠臣伍子胥 (sixth-fifth century B. C.). He is here shown in attendance while Prince Ho Lü 闔閭 of Wu publicly flogs the corpse of Prince P'ing 平 of Ch'u who had unjustly put Wu's father and elder brother to death. The subject of (g), curiously enough, is almost a continuation of this story, for it shows Ho Lü's son and successor, Prince Fu Ch'ai 夫差 of Wu, who, contrary to the advice of his ever loyal Minister Wu Tzŭ-hsü, received with open arms the famous beauty Hsi Shih 西施 when she arrived at his Court through the machinations of Fan Li 范蠡, Minister of Kou Chien 勾踐, Prince of Yüeh 越, and was so debauched by her and so distracted from affairs of state that his loyal Minister committed suicide and his army fell an easy prey to

the invading forces of Yüeh. Why the mirror bearing this design should have been published as, in effect, "a T'ang imitation of a Han original," I cannot tell from the outline reproduction; but I think its close relationship to (c) No. 49 in subject and technique provides good reason for believing that the two mirrors are closely related also in date—probably Three Kingdoms. Our own example, however, is different in technique and subject and is, perhaps, a little later in date.

The historical part of the decoration is identifiable chiefly by means of the labels which accompany some of the figures, and appears to deal with the imprisonment of Wên Wang 文王, virtual founder of the Chou dynasty, by Chou Hsin 紂辛, last Emperor of the Shang dynasty, to whom Wên was betrayed by Hu 虎, Marquis of Ch'ung 崇. At that time, Wên was known as Hsi Po 西伯, "Chief of the West,"[11] and is described as a man of exemplary virtue and beneficence. His enforced detention in Yu-li 羑里 lasted for 7 years, and during that period he is said to have added the hexagrams to the trigrams of the *I ching* 易經. He owed his release from durance vile to the loyalty and acumen of his adherents San I-shêng 散宜生, Hung Yao 閎夭, and Chiang Tzŭ-ya 姜子牙, better known as Lü Shang 呂尙 or T'ai Kung Wang 太公望 (cf. our painting 11.296), who collected a large number of "marvelous things"—including nine quadrigae, dappled horses 文馬, and a beautiful daughter of the princely house of Hsin 莘—all of which, through the instrumentality of a Court favorite named Fei Chung 費仲, they presented to Chou Hsin. Greatly delighted—especially by the lovely lady—the Emperor at once pardoned the Chief of the West, made him a handsome present of weapons, and restored him to favor. This story is told at length in chapters 3, 4, and 32 of the *Shih chi* (**9**, vol. 1, pp. 202 and 218–222; vol. 4, p. 36; see also Legge, **35**, vol. 3, pt. 1, p. 270; and vol. 5, pt. 2, p. 562, lines 14–15, and p. 567).

As illustrated on our mirror, the scene occupies the whole of the middle zone of decoration. This zone is divided into three nearly equal segments by representations of buildings; but the scene itself seems to be continuous. Immediately to the left of the largest of the buildings are two women standing in respectful attitudes; each of them is labeled *ch'ing i* 靑衣, literally "blue robe," a term meaning, in this case, something like "waiting-woman." They are evidently in attendance on the personage seated in front of them, who is possibly Ta Chi 妲己, the notorious concubine of Chou Hsin, or possibly the beautiful lady procured for that monarch on behalf of the Chief of the West. Next to her is an open stall (cf. (g)) in which is seated another personage; and just beyond the upper left-hand corner of the stall is a label which, I think, reads "King Chou" 紂王, indicating that the occupant of the stall is Chou Hsin himself. His proper name, it has been said, was Shou 受, and, indeed, it is by this name (i. e., "Shou, King of Shang" 商王受) that he is called in the *Shu ching* (**35**, vol. 3, pt. 2, p. 284, text and note 4); but the *Shih chi* refers to him as Emperor (帝) and calls him Hsin 辛, his personal name, or Chou 紂, meaning "cruel," an epithet applied to him by "the whole Empire" (天下謂之紂) because of his wickedness. This segment of the scene is completed by a gesticulating man who may, perhaps, be the go-between Fei Chung, and next to him stands another building. To the left of it is an armed man labeled *Huang-mên chi* 黃門卽

[11] Cf. 35.21–35.22, p. 53.

"Here is a courtier"; next, another armed man labeled *Yü-lin chi* 羽林卽 "Here is a palace guard"; and on the ground to the left of him is a dome-shaped cage containing, perhaps, a bird. What this cage signifies, I do not know. Above it, anyway, is a label of three characters, "King Wên of Chou" 周文王 (the posthumous name and title of the Chief of the West), identifying the next figure to the left which is that of a seated man apparently clasping to his breast with both hands a rectangular object. Possibly this object may be intended to represent the *I ching*, on which King Wên is said to have worked during his captivity; but to me it also looks as though it might be a frame used to fetter the prisoner's hands. Around his neck is a scarf, the free end of which is held by an armed man standing behind him, and behind this man, again, are two unarmed men in attitudes of respect. The second of these is labeled *yang shu* 陽書, an expression which, as it stands, makes no sense. The man in front of him is labeled *yang* 陽 and a character which may be meant for *shu* 書, though it has an extra stroke at the top. Below this is the character *hu* 虎, "tiger," which may serve here to identify the armed man guarding the captive King as Hu, Marquis of Ch'ung, who had betrayed Wên to the Emperor. Under this, and in smaller script, are the words *wên chi* 馼卽, "Here is a dappled horse," referring, no doubt, to the horse shown in the next segment of the scene. The *Shuo wên* defines 馼 as "a horse with a red mane, striped body, and eyes like gold," and says that in the time of King Wên (or, according to one editor, King Ch'êng 成) such horses were brought as gifts by the Dog Jung 犬戎 barbarians, and were also included among the presents "offered to Chou 紂 by the Chief of the West." These statements are confirmed by the *Shih chi* (**9**, vol. 1, p. 218) which, however, writes 文馬 instead of 馼, and says that the animals came from the country of the Li Jung 驪戎.

To the left of the last and smallest of the buildings, there is a bird, and below it a big dog held in leash by an armed man who holds also the halter of a saddled horse behind him which is eating grain out of a large basket. Behind the horse is another bird and a grazing water buffalo, and behind the latter is a two-wheeled covered cart and still another bird. There are also seven embossed dots—one above the horse, one below the dog's tail, and five in a row below its fore paws. Constellations are sometimes represented in this way on mirror backs; but such an explanation of the dots seems hardly to apply in this case. Nor can I explain the three birds, although it is possible that dots and birds alike are merely space fillers put in to thicken this segment of the design. The dog may be intended to identify the Dog Jung barbarians, who were supposed to be descended from and ruled by a dog; but since Chou 紂, according to the *Shih chi* (**9**, vol. 1, p. 200), was an ardent collector of dogs, the one shown here may be part of the gift offered by the Chief of the West. The horse, no doubt, is the striped or dappled animal heralded by the label in the preceding segment.

The inner zone of decoration in high relief exhibits four large animals, a smaller dancing animal, and three posturing human figures. The narrow, outer zone of countersunk reliefs exhibits a bird, a charging water buffalo, a fish, a tiger, and other animals, as well as trailing plant forms. I am unable, however, to explain the symbolism of these designs, though they are common enough on mirror backs.

Their general character is, of course, auspicious, and it is quite possible that the bird and tiger are the familiar Red Bird and White Tiger (see 36.4; regarding the fish, cf. 37.15).

(J. A. P., 1944.) W. P. Yetts has published (**93**) a mirror in the collection of Mrs. Walter Sedgwick, of London, that has interesting similarities with this. Except for the maker's name, the characters of the inscription are identical, with the thirty-sixth and thirty-seventh used in inverted order. The personages depicted are Wu Tzŭ-hsü 伍子胥, Fan Li 范蠡, and others concerned in one of the legends discussed above.

Plate 41

32.14 Terminal ornament in the form of a dragon head.

Deep socket with square cotter hole for attachment to the end of a chariot pole. Bronze overlaid with gold foil engraved with curvilinear designs somewhat obscured by patination. Teeth and eyeballs overlaid with silver foil; glass pupils.

Chou dynasty, state of Han 韓. Length 10 1/16 in. (.255 m.).

(J. E. L., 1932.) The skull and lower jaw seem to be a single casting, but the carefully modeled hard palate and the tongue were separately made. This may be true of the ears also, although there is no conclusive indication that it is. The auditory canals, anyway, like the nostrils, penetrate to the head cavity. Two rectangular shoulders and a small stud near the lower margin of the socket, as well, probably, as the transverse rectangular opening in the palate, were connected, no doubt, with the mounting of the head on a chariot pole. The small loop under the chin may well have served for the suspension of a tassel. The glass of the eye pupils seems to be Arabic or Syrian or Phoenician rather than Chinese; they are, perhaps, the two halves of a single large bead.

The slender, geometrical patterns delicately engraved in the gold foil are not very effective even near to, and, indeed, can hardly be seen at a distance. They appear, however, on almost all surfaces, not excepting the margins of the nostrils, the roof of the mouth, the underside of the tongue, etc. The incrustation of bronze patina must have come chiefly from inside the head. Wherever I have removed bits of it, the gold and silver foils beneath are quite intact. The nick in either ear, and the scar on the neck behind the left ear, are recent.

(J. A. P., 1944.) This object is one of those published by Bishop White (**85**, p. 59, No. 002) purporting to come from the Han 韓 tombs at Chin-ts'un 金村 in Honan, and thus may be dated, with a fair degree of probability, sometime between 450 and 230 B. C. (cf. 36.3). It has also been published by Umehara in four separate works (**80**, pt. 3, vol. 1, pl. 51; **72**, pl. 2; **78**, pl. 51; **81**, pl. 85). According to Bishop White it comes from one of the horse pits and not from an actual tomb. These pits, it appears, were dug near the entrance of the tomb; and here the chariots and horses used in the funeral procession were buried after the coffin had been carried into the tomb (op. cit., p. 34, and plan facing p. 16). Horse bones and chariot fittings were the only things found in the pits, while the tombs themselves yielded no similar materials.

The above note about the probable Arabic, Syrian, or Phoenician origin of the glass eyes was written when, for want of reliable evidence to the contrary, it was assumed that glass was not produced in China earlier than about the fifth century A. D. Since that time, considerable study has been devoted to the subject; and in 1938 C. G. Seligman and H. C. Beck published (**56**) apparently conclusive evidence of the manufacture of glass in China in pre-Han times. Their investigations involved the spectrographic analysis of numerous specimens from various parts of Asia, and among the Chinese examples were a number of beads from the same Chin-ts'un site which presumably yielded this dragon head. One of the interesting points brought to light was that Chinese glass of Han or pre-Han date contains barium in measura-

ble amounts, while in T'ang and later glass, and glass from Central Asia, the Near East, and the West only occasional traces of that element are present. It is, of course, impossible to state the origin of the dragon's eyes without spectrographic analysis of their content; but, in the light of this new information, it is perfectly possible that they may be Chinese.

32.15–32.16 Pair of terminal chocks (one illustrated).

All but the under and bearing surfaces decorated with designs inlaid with gold and silver somewhat obscured by patination and accretions due to burial.

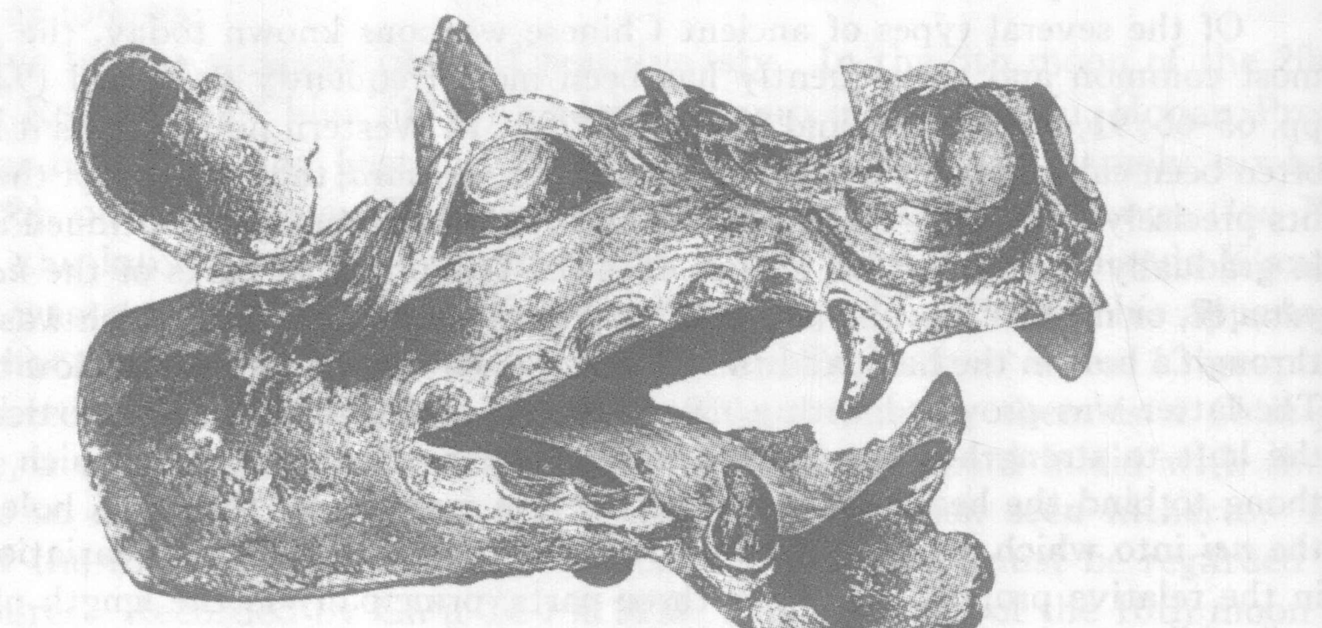
Chou dynasty, state of Han 韓. 32.15, length 10 1/8 in. (.256 m.); 32.16, length 10 1/16 in. (.255 m.).

(J. E. L., 1932.) In both cases the channel for a strap or rope is formed by the open jaws of a mammalian head, the lower jaw being greatly elongated upward in a scotia curve and attenuated to end in a snake head. The mammalian head and neck are hollow and serve as the socket; the elongated lower jaw is solid; but the whole thing seems to be a single casting. The socket of 32.16 contains the remains of, presumably, the wooden chariot member to which the chock was attached.

(J. A. P., 1944.) A pair of similar objects in the Sung imperial collection is published in the catalogue (**83**, ch. 27, pp. 32–33) as being carriage ornaments. The text, discussing the carriages of the ancients, goes on to say that the holder of the carriage pole is shaped like a claw; and that this thing is made in the form of a *p'i hsieh tun fu* 辟邪蹲伏, a crouching *p'i hsieh* (a fabulous animal) with a repeated ornament consisting of a dragon and serpent. Its round aperture can contain a cross beam, and it is called a carriage-pole support. While this description is somewhat lacking in detail, and the authority of a twelfth-century writer discussing the functions of late Chou vehicles is certainly not above suspicion, it is at least suggestive. Can it be that this object was fixed on a short stick, and that the bronze chock received and supported the carriage pole when the horses were unhitched?

The wood has been identified by W. N. Watkins, of the Division of Woods and Wood Technology of the Smithsonian Institution, as *Melia azedarach*, Linn. This tree, which grows to a height of 30 or 40 feet or more, is commonly known as chinaberry, China tree, or Pride of India. Its Chinese name is *Lien* 楝, or, commonly, Golden Bell 金鈴子.

Plate 41

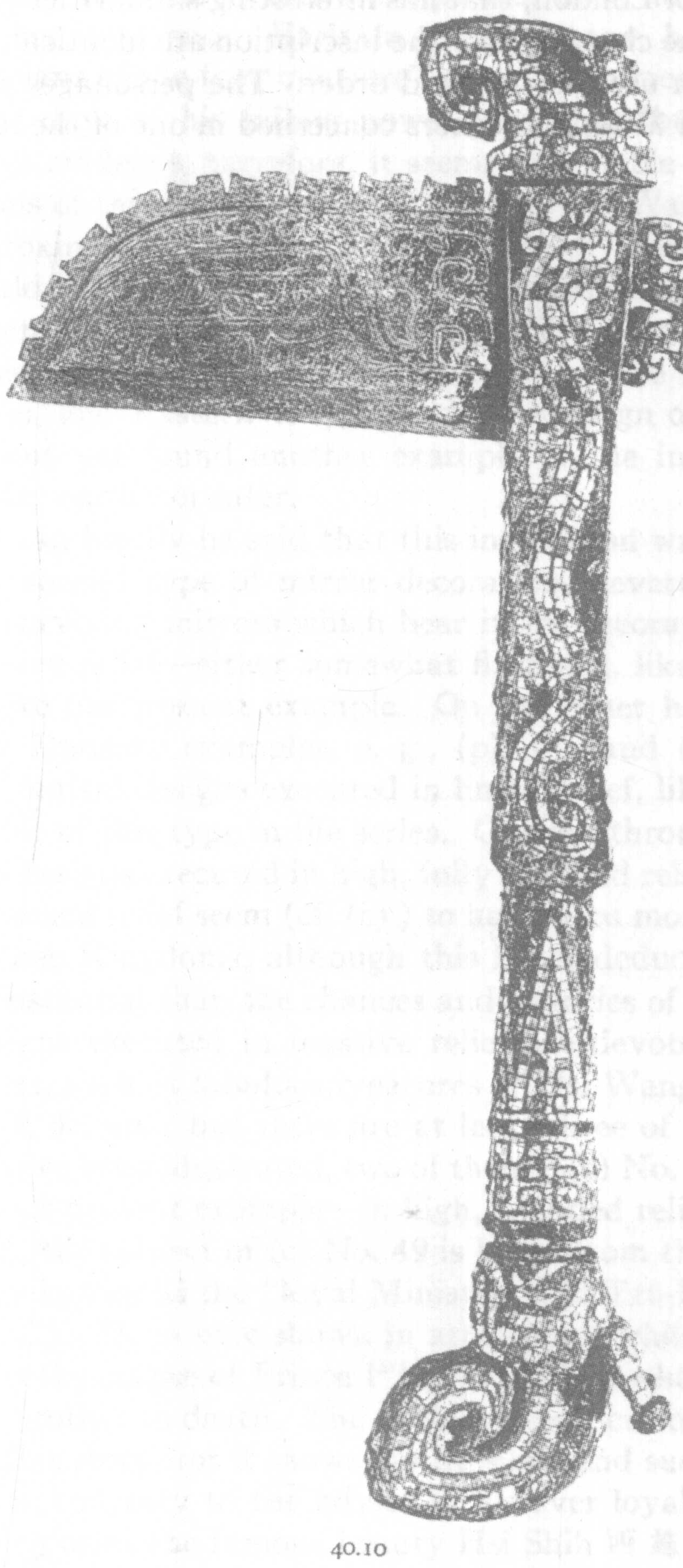


32.14



32.15

Plate 42



40.10

PLATE 42

40.10 Ceremonial sickle.

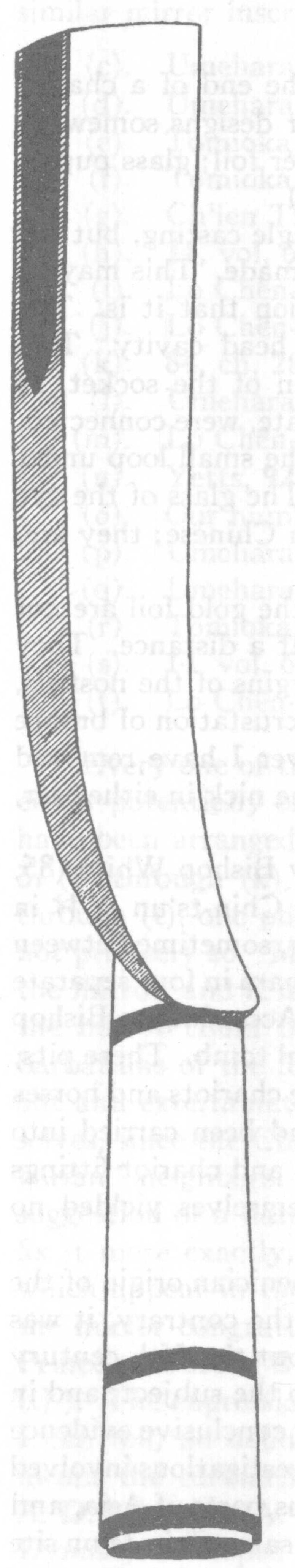
Blade of brown jade set in a haft of bronze inlaid with turquoise.

Shang dynasty. Height 13 9/16 in. (.345 m.) over all.

(J. A. P., 1944.) The object consists of four separate parts: a jade blade, a bronze haft, a cap on top of the latter, and a butt below. The blade is set into a socket at the upper end of the haft; and as there is no evidence that a pin was used, it must originally have been secured by some adhesive material like cement. The elaborate projection opposite the blade is an integral part of the haft. Though it has no such practical function as the *nei* 內 found on weapons of the *ko* type (cf. 41.5, p. 89), its strong resemblance to that member may perhaps serve as evidence that the two types of implements were related. The present assembly of the haft, blade, and cap probably simulates the original appearance of the object because it is the way the pieces fit together. It seems likely, however, that a wooden grip, perhaps about 5 inches long, was placed between the lower end of the haft and the butt.

The bronze parts are all richly inlaid with turquoise in designs characteristic of Shang and early Chou times. The jade blade is decorated with dragons in incised linear relief, its curving top is deeply notched, and the cutting edge is ground sharp. The elaborate quality of the decoration and the unstable fastening of the blade leave no doubt that the object was used for ceremonial rather than practical purposes.

Although its exact use remains unknown, the curious shape of the handle suggests the way in which it must have been held and leads to its designation as a sickle. The drawing shows a three-quarter view of the handle, with the blade, cap, and butt removed. The upper part is rectangular in section with a marked lateral curve toward the lower end; and the actual grip, projecting down from the outside of the curve, is round. From this it would seem that it was probably held in a horizontal position, in the right hand of the user, and operated with a lateral wrist motion, cutting from right to left, much as a sickle is used in cutting grass today.



Detail of handle.

PLATE 43

41.5 Ceremonial blade of the type *ko*.

Blade of gray and white jade mounted in bronze inlaid with turquoise. Bronze surfaces heavily incrusted with malachite.

Shang dynasty. Length 16½ in. (.419 m.) over all.

(J. A. P., 1944.) A number of similar weapons, purporting to come from Anyang have been published by Umehara (**71**, pls. 33–36), and it is quite possible that this example came from that site.

Of the several types of ancient Chinese weapons known today, the *ko* is the most common and consequently has been most frequently described (**92**, vol. 1, pp. 65–66; **91**, pp. 95–104; and **58**, pp. 17–20). In Western publications it has most often been called dagger-axe, halberd, or *hache poignard*, though none of these terms fits precisely. The type existed in stone in Neolithic times and continued in bronze in gradually changing form (**2**, pp. 45–47). The principal parts of the *ko* are the *yüan* 援, or main blade, the *nei* 內, or tang projecting backward which was inserted through a hole in the haft, and the *hu* 胡, or down-curving member below the *yüan*. The latter was provided with a narrow flange which fitted into a vertical slot in the haft to strengthen the joint, and one or more holes through which passed a thong to bind the head and haft together. In many cases there is a hole through the *nei* into which a peg could be driven for the same purpose. Variations occur in the relative proportions of the three parts, principally in the length of the *hu*; and while no absolute dating can be based on form, the relative chronology has been tentatively established, and this member gradually developed and was extended for practical reasons. Examples with as many as seven holes are known.

Related to the *ko* is a weapon called the *chü* 瞿 to which the haft was attached by inserting it through a tubular process immediately behind the *yüan*. Extending behind this tube is a vestigial *nei* whose function was perhaps to improve the balance of the weapon, or, when sharpened, to provide a short chopping blade as was sometimes done on the true *ko* as well.

In what appear to be later examples of the *ko*, those with very long *hu*, the angle between *yüan* and *hu* is often greatly increased so that the *yüan* points upward as much as 45° above the horizontal (**86**, pls. 39, 40, 41, 66, 67). This tendency ultimately led to the development of a weapon called *chi* 戟 in which the *yüan* and the *hu* formed a continuous vertical blade, and the *nei* performed its usual function of fitting through the haft. A series of examples illustrating this development is in the collections of the Museum of Far Eastern Antiquities in Stockholm but has not been published. The *chi* occurs in late Chou and Han times (**10**, figs. 47, 48, etc.) and appears to have superseded the *ko* about that date.

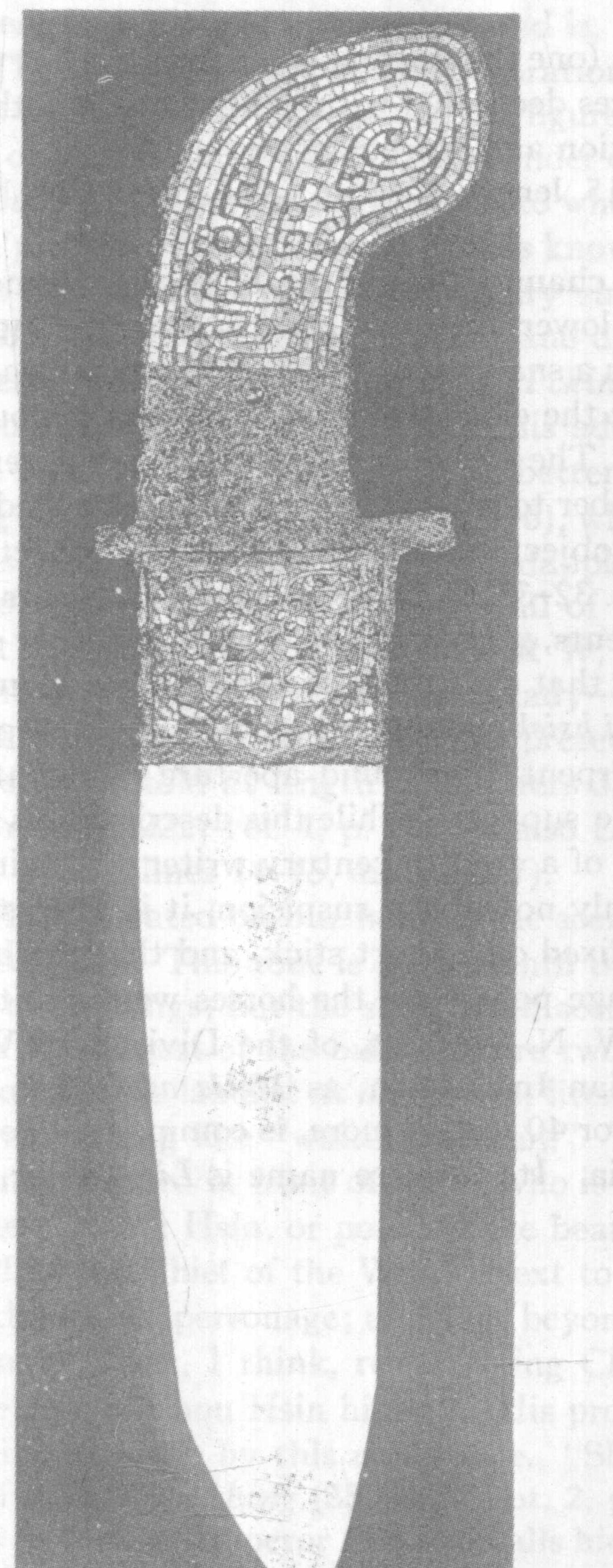
41.4 Ceremonial implement.

Blade of gray-brown and white jade mounted in bronze inlaid with turquoise. Socketed for vertical hafting; bronze surfaces incrusted with malachite.

Shang dynasty. Length 8⅜ in. (.213 m.) over all.

(J. E. L., 1941.) Published examples of blades mounted for vertical hafting, and made of these materials, are lanceolate in form (**70**, pl. 25; and **71**, pl. 38); and it is difficult to determine whether a square blade like this is derived from a weapon or some other sort of implement. At all events, the type must be rare. Adhering to one side of the blade is an irregular piece of what appears to be gesso on which are the remains of a design painted in red.

Plate 43

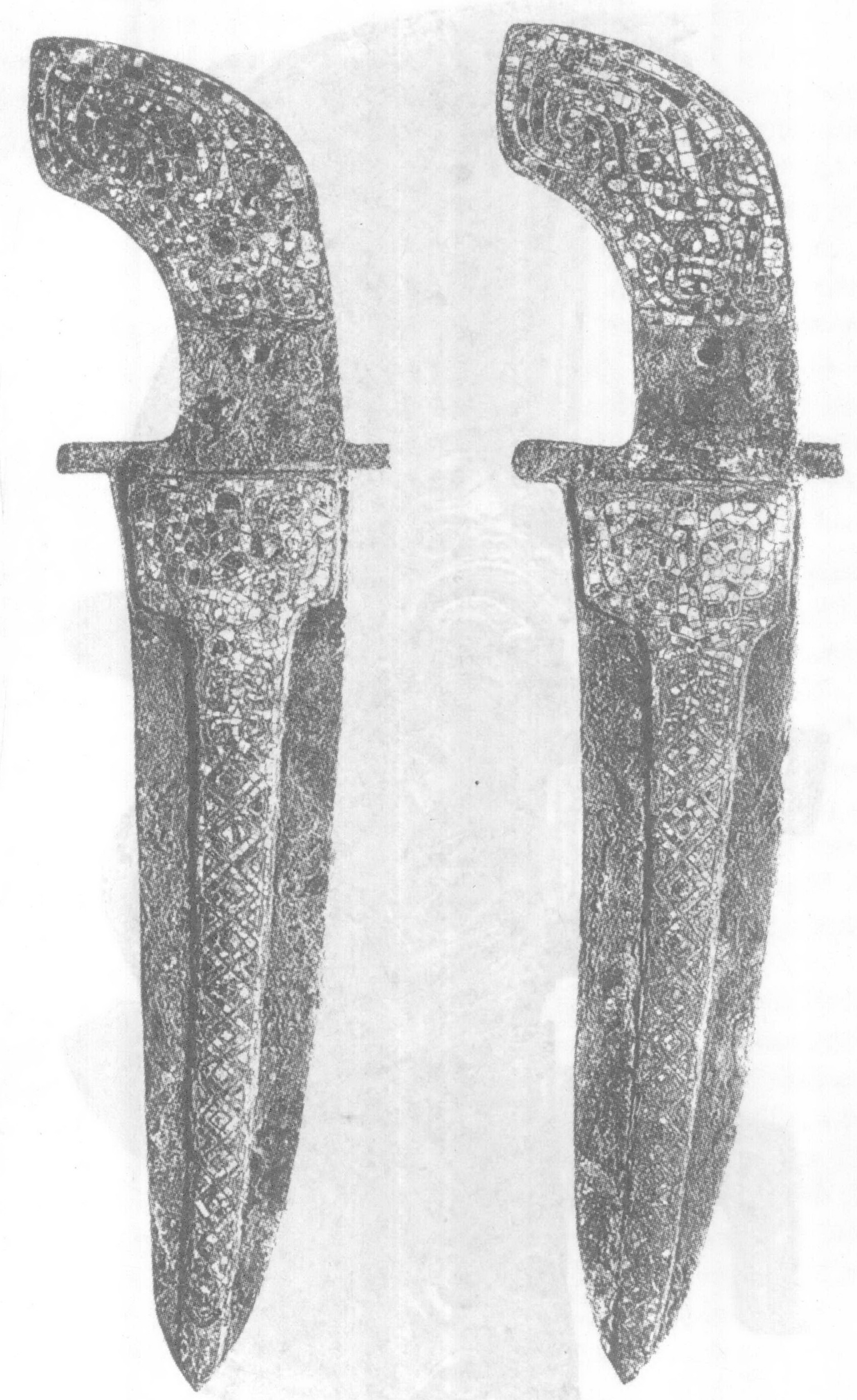


41.5



41.4

Plate 44



39-40 39-39

PLATE 44

39.39–39.40 Pair of ceremonial blades of the type *ko*.

Decorated with turquoise inlay. Bronze areas incrusted with malachite.

Shang dynasty. 39.39, length 15½ in. (.393 m.); 39.40, length 15 7/16 in. (.391 m.).

(J. A. P., 1944.) These *ko* are of presumably early form, lacking the *hu* (cf. 41.5). The two processes extending upward and downward at the back of the *yüan* provide the only means for binding to the haft with a thong, and the hole in the *nei* probably received a pin to strengthen the joint.

At the back of the *nei* on each side is an area inlaid with small bits of turquoise arranged to form a small dragon with horn, snout, and curled tail, a type frequently occurring on Shang bronzes. Further inlay of the same material appears in a raised area on each side of the *yüan*. The back end of this, when the blade is held point down, roughly suggests the *t'ao-t'ieh*, and the long, narrow part has a geometric pattern.

The care taken with the inlay and the thinness of the objects as a whole indicate that they were made for ceremonial purposes rather than as functional weapons.

These objects have been published by Umehara (**71**, pl. 37) and purport to have been found at An-yang.

PLATE 45

34.3 Blade of the type *tao*.

Socketed for hafting. Decorated with casting in relief. Incrusted with malachite, some azurite; areas of unaltered metal.

Chou dynasty. Height 13 3/16 in. (.335 m.); weight 2 lb. 14 oz.

(J. E. L., 1935.) The group of 12 weapons (34.3–34.14[12]), of which this is one, was bought as a collection, and with it came a statement in Chinese which may be translated as follows:

"Twelve bronze weapons of the Chou dynasty. In the 6th moon of the 20th year of the Republic of China (1931) a native dug up in Wei-hui-fu, Honan Province, not far from An-yang District, a group of ancient weapons, namely: six halberds (*ko* 戈), one lance (*mou* 矛), two hatchets (*fu* 斧), and three knives (*tao* 刀). On one of the knives are the two characters K'ang Hou 康侯 (Marquis K'ang). K'ang-shu was a younger brother of King Ch'êng of Chou[12a], and his appanage included what are now An-yang District and Wei-hui Prefecture. These 12 weapons are undoubtedly relics of the Chou Marquis K'ang. Among them is a *Ch'ih-yu* 蚩尤 knife, a circular knife, an ox-head halberd, and a halberd inlaid with shell. Antiquities so remarkable in form and make have not been seen hitherto. By students of the manners and customs of ancient Chou, they must be regarded as great treasures. Recorded by Ch'u Tê-i 褚德彝. The 11th day of the 10th moon of the 20th year of the Republic of China (1931)."

Ch'u Tê-i is said to have been associated in some capacity with the famous collections gathered and published by the late Tuan Fang 端方. In any case, his record of these weapons is at present our only available information as to where and when they were found, and there is no apparent reason to doubt its essential accuracy. Just how Ch'u groups the weapons as *ko*, *mou*, and *fu* is not clear in every case; but those he describes as "a Ch'ih-yu knife" (34.3), "a circular knife" (34.4), "an ox-head halberd" (34.7), "a halberd inlaid with shell" (34.8), are all easily identifiable.

(J. A. P., 1944.) 34.3 has a loop handle at the back, and a tubular socket runs from the base of the blade to the upper joint of the handle. The principal relief design is on the surface of this tube. At the base, facing downward, is a feline head with gaping jaws and four large tusks. Seated on the back of this head is a semihuman figure. The legs end in birdlike feet with three claws; and between the first and second of these is a round hole which may have received a pin to secure the haft. The open mouth of the figure has a long pendulous lower lip and large tusks whose occlusion is such that the upper tusks come inside the lower. Markings on the cheek suggest tattooing, a practice attributed by the Chinese to barbarian peoples. The top of the head is clutched in the jaws of a dragon whose body is formed by the handle with its scale pattern. Above this is a knife-shaped pattern following the curve of the blade itself. The wavy edge of the blade is like that of a

[12] Because of its extremely fragmentary condition 34.14 is without value as a document and is not included in this publication.

[12a] The writer of this statement is in error as K'ang-shu was a younger brother of King Wu (Wu Wang) and therefore an uncle of King Ch'êng (Ch'êng Wang).

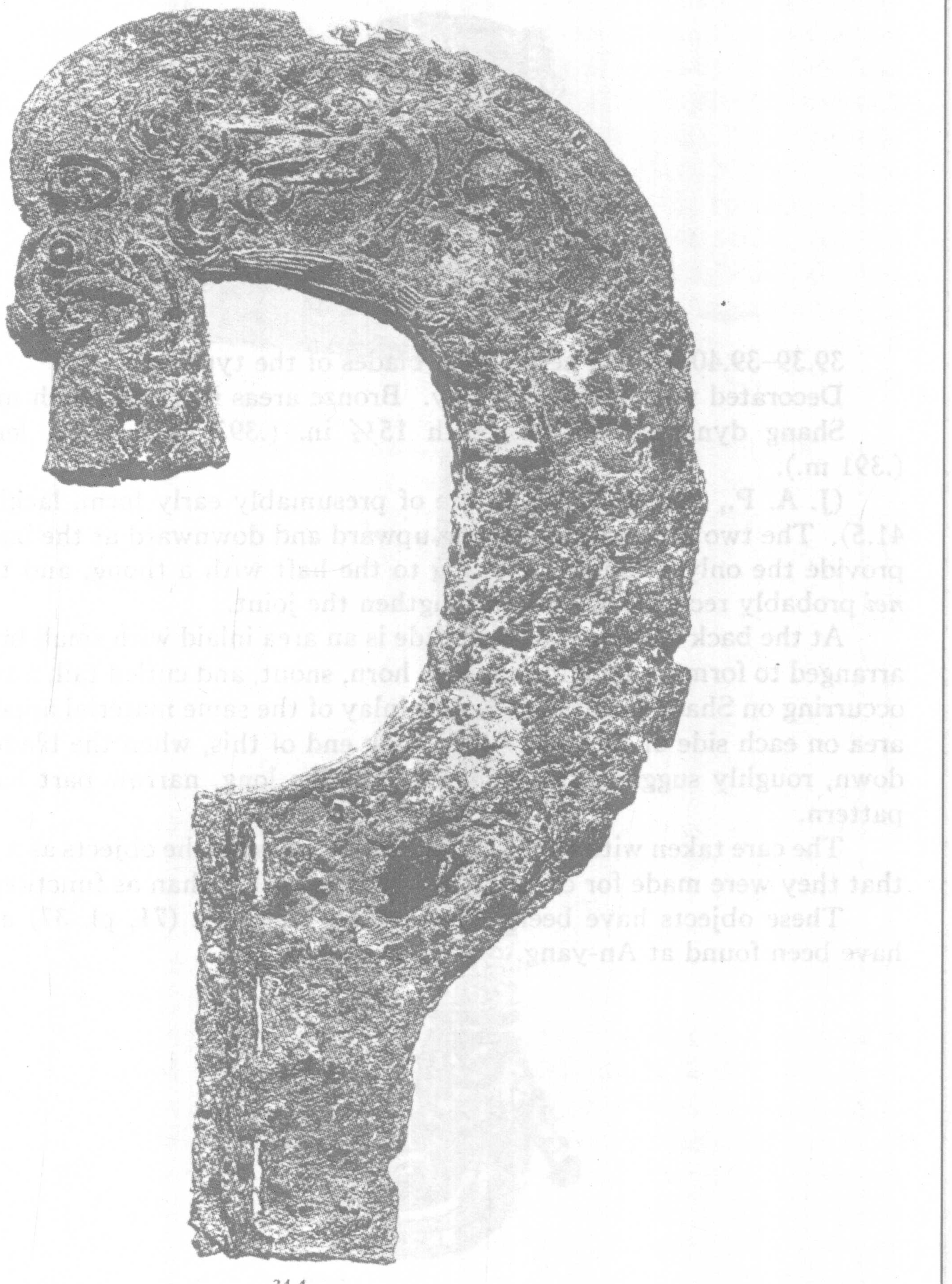
bread knife and has been cast with a bevel of about 3/16 in. of which less than 1/16 has been coarsely ground or filed. The back of the socket, below the handle, has three apertures, one of which has been filled with a plasterlike substance.

The representation of a dragon or some other monster holding an anthropomorphic head in its mouth is well known on Chou dynasty objects, executed in both bronze and jade. While there need be no doubt that this had a definite meaning for the ancient Chinese who made and used these objects, such meaning is not known today. Various suggestions have been advanced: that the dragon is acting as a protector, that the scene symbolizes some aspect of the eternal struggle between darkness and light, that it has a lunar symbolism, etc.; and while the truth may lie in one of these directions, no conclusive evidence has yet been found.

The term "Ch'ih-yu knife" used by Ch'u Tê-i refers to a certain Ch'ih-yu, one of the unruly lords of the legendary period whom the Yellow Emperor had to overcome before he could establish order (**57**, ch. 1, 3a–4b). A variant story (**9**, vol. 1, p. 27, n. 2) tells of 21 brothers named Ch'ih-yu with the bodies of beasts and human voices, heads of copper and foreheads of iron, who ate sand, made weapons of war, and terrorized the world, massacring and killing. These were also suppressed by the Yellow Emperor, this time with the assistance of a *deus ex machina*. Later, when the Empire was unsettled again, the Yellow Emperor drew an image of Ch'ih-yu to terrify the people. It might be suggested that this design represents Ch'ih-yu being overcome by the Yellow Emperor in the form of a dragon; but, lacking definite proof, it seems safer to suppose that any such formidable blade as this might well be called a Ch'ih-yu knife on the basis of that part of the story which describes the brothers as makers of weapons.

The weight of this weapon together with the fact that the blade has been sharpened suggests that it was intended for actual use rather than for merely ceremonial purposes.

Plate 46



34.4

Plate 45



34.3

PLATE 47

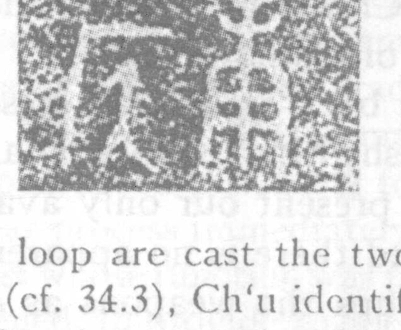
34.6 Blade of the type *tao*.

Socketed and looped for hafting. Decorated with casting in relief. Lightly patinated with malachite and some azurite; areas of unaltered metal. Inscription of two characters. (See cut.)

Chou dynasty. Height 11$\frac{3}{16}$ in. (.297 m.); weight 2 lb. 10 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The cutting edge of the blade, running all the way around the outside has been somewhat damaged; one upper corner is broken off, and the long edge is bent in two different directions, apparently as a result of heavy blows against some unyielding substance. The latter must have occurred when the metal was relatively new, the former when it was old and brittle. Along the back part of the blade, in low relief, on each side is a sinuous serpentlike dragon with three hooklike projections attached to its side. Along its back is a deep groove; and the head curls around at the top so that it faces upward. Three broad loops attached to the back of the blade serve to hold a haft in place, and its upper end rests in a socket whose sides are decorated with the dragon heads. A fragment of wood, purporting to be from the original haft, remains in the socket and extends down to the second loop.



On one side of the second loop are cast the two characters *k'ang hou* 康侯, Marquis K'ang. In his report (cf. 34.3), Ch'u identifies this man with K'ang Shu 康叔, a son of Wên Wang 文王 and younger brother of Wu Wang 武王, the Chou king who conquered Shang. According to the surviving records, all of which were compiled many centuries after these events, this son of Wên Wang was named Fêng 封, and was called K'ang Shu. The Duke of Chou, acting as regent for his nephew Ch'êng Wang, put K'ang Shu in charge of the former Shang territory in the east with the title, Marquis of Wei 衛侯. The capital of this feudal state was at Chao-ko 朝歌, the site of the modern Ch'i 淇, in northern Honan, the place where this group of weapons is said to have been found (cf. **9**, vol. 1, p. 246, and **35**, vol. 3, pt. 2, p. 381). K'ang Shu is not referred to as K'ang Hou in the records; but in view of the fact that he was ennobled with the rank of marquis, and that the records are not only of much later date but also in very brief form, such a designation must be admitted as possible, thus placing the weapon in the reign of Ch'êng Wang. This may well be the same K'ang Hou mentioned on the *kuei* in the collection of Maj. Gen. Sir Neill Malcolm. The problem is discussed by Yetts (**90**). In that case it would be related in time to the two ceremonial vessels 30.54 and 33.2.[13] It should be noted, however, that while the whole group of weapons was reported to have been found together, this fact would not constitute evidence that they were all made at the same time and place. There is, however, sufficient similarity in the weight, size, and general quality of 34.3, 34.4, and 34.6 to suggest that they had a common origin.

[13] Cf. pp. 48-50.

PLATE 46

34.4 Blade of the type *ch'i*.

Socketed and pierced for hafting. Decorated with casting in relief. Heavily incrusted with malachite, some azurite; areas of unaltered metal.

Chou dynasty. Height 12 in. (.304 m.); weight 2 lb. 4 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The blade is provided with a thin flange to fit into a slot in the haft, and three long, narrow holes through which a thong could be laced to strengthen this joint. A socket, ovoid in section, projects downward from the upper end of the blade to receive the top of the haft, and its sides are pierced with small round holes for a pin. The decoration follows the curve on the thick back of the blade; and, though heavily incrusted, some of its details remain visible. A semihuman figure in crouching position is somewhat similar to that on 34.3. The hands here are held in front of the lower part of the face of which only the corner of the mouth, a fragment of the nose, and the eye are distinguishable. The long, straight hair streams upward along the curving blade and ends in a point near the top of the socket. Above the hair is a monster with curving tail and four legs ending in clawlike feet. Its neck turns downward so that the feline head with open mouth and fangs forms the top of the socket. The edge of the blade, now much corroded, extends all the way around the outside of the curve and appears to have been ground or filed to a cutting edge.

Like 34.3, this was in all probability a weapon made for use; and the weight and provisions for substantial hafting suggest that it may have been used somewhat in the manner of a two-handed axe.

Undoubtedly this is the "circular knife" 環形刀 of Ch'u Tê-i's note, and it is doubtful that he meant this as a technical term. A blade of similar form, illustrated in **38**, ch. 37, p. 9a, is called a *ch'i*. In that case the lower part of the blade carries two loops to receive the haft (cf. 34.6). The weapon there described is about 7 in. long, by about 4 in. wide, and weighs about 1½ lb., somewhat over half the size of this one.

Plate 48

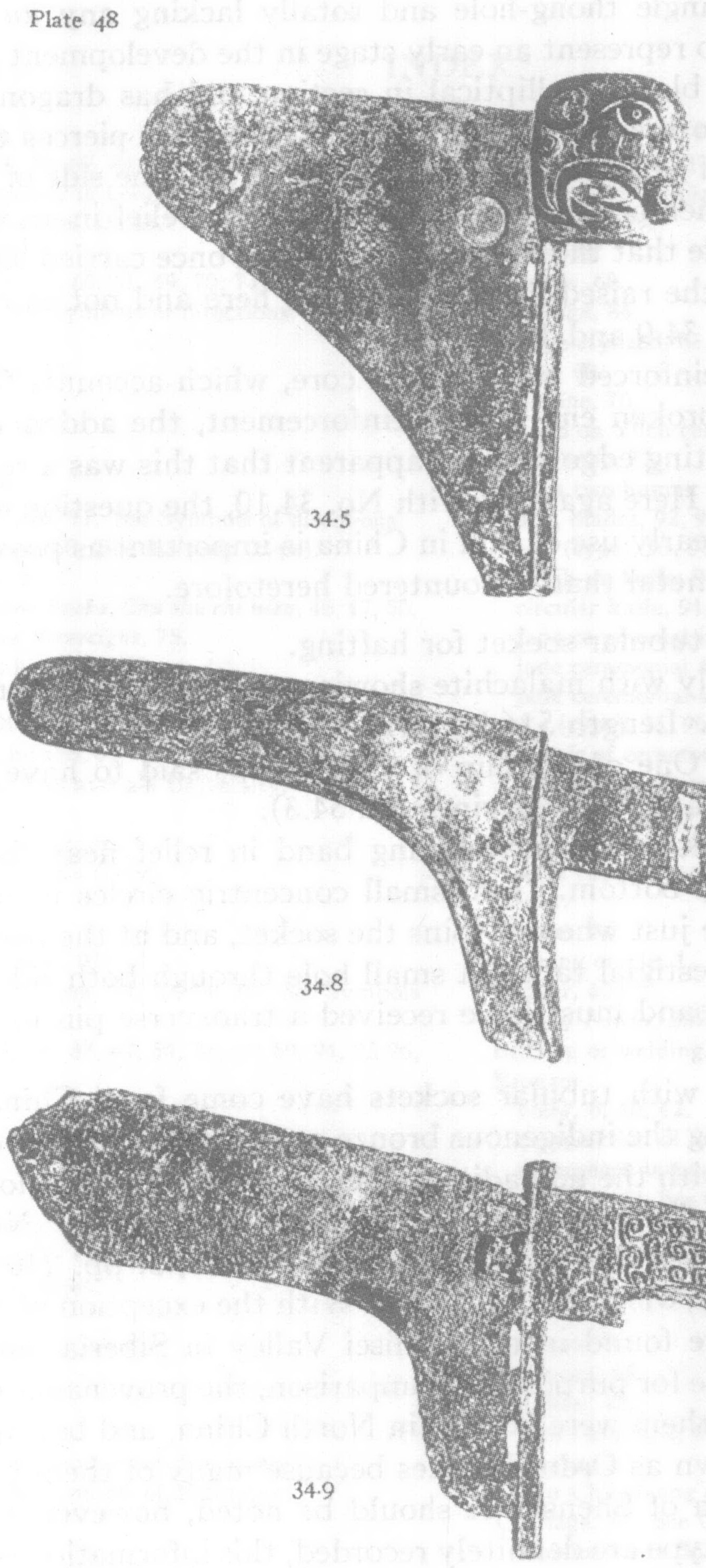


Plate 47

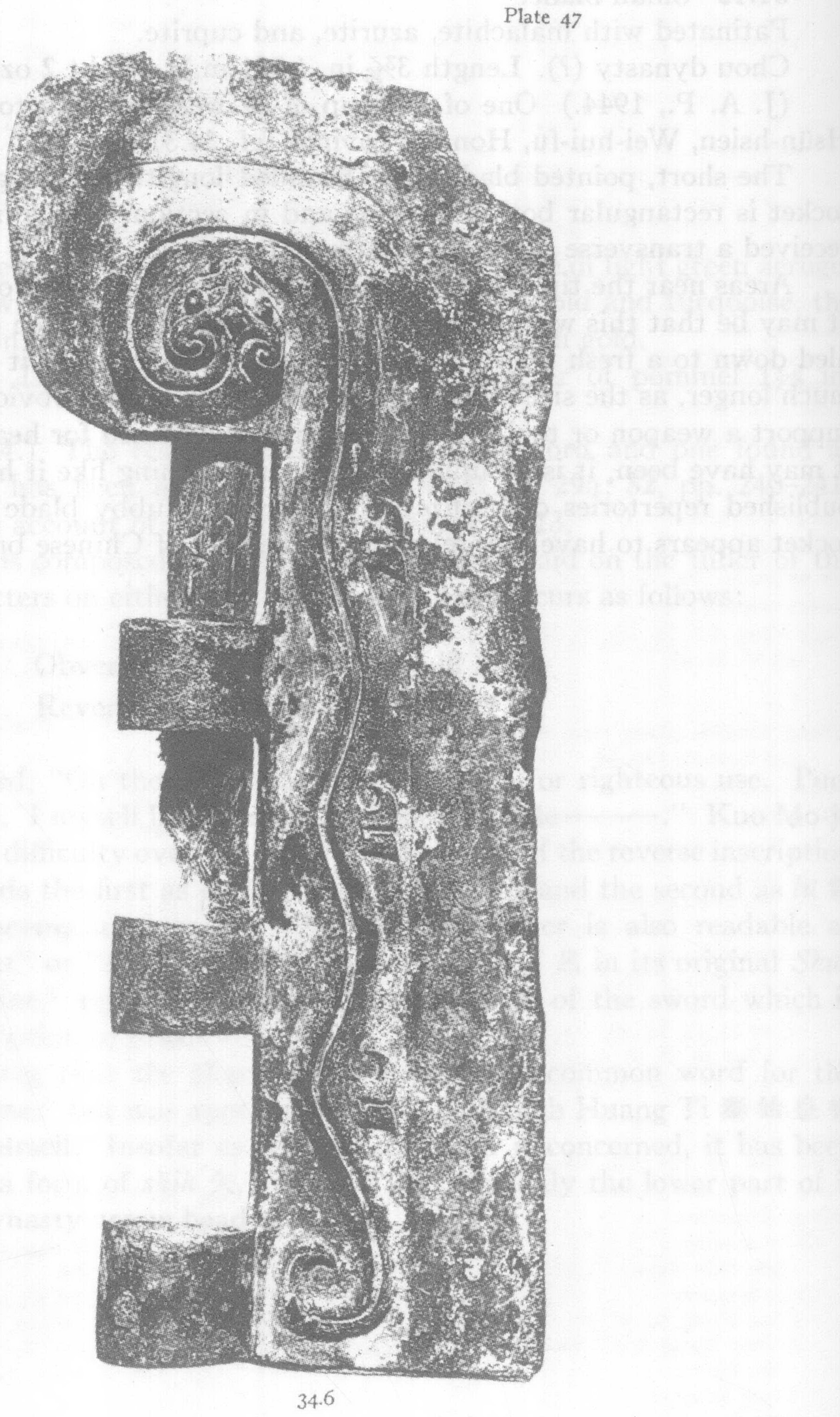


PLATE 49

34.7 Blade of the type *ko*.

Decorated with casting in relief. Patinated with malachite and cuprite.

Chou dynasty. Length 8⅝ in. (.219 m.); weight 8.5 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

This *ko* is of usual form with a single hole in the *hu*. At the back of the *yüan* is a dragon or monster head in low relief, and its curled ovine horns rise from the surface in such a way as to embrace the haft when it is fitted over the *nei*, thus giving additional support. Though apparently not numerous, other examples of the kind are known (**92**, vol. 1, No. A.150; and **62**, p. 24a-b). The Eumorfopoulos *ko*, like this one, has an intaglio strip with a raised ridge down the center extending along the center of the *yüan* itself. On the Hsün-hsien 濬縣 piece this element is very short and is described in the text as the beast's tongue sticking out. Yetts describes his piece as having a hole through the *nei* in such a position that a pin may pass inside the curve of the horns, through the haft, and out the other side. He states that this pin still remains. This arrangement does not apply to the present *ko* as there is no hole in the *nei*.

The *yüan* has been broken off and repaired just in front of the dragon's snout, and is slightly bent near the middle. The repair is old, and the blade was undoubtedly bent before the metal was old and brittle.

34.10 Blade of the type *ch'i*.

Decorated with casting in relief. Cutting edge broken off, and heavily covered with rust to which fragments of wood adhere. Other parts patinated with malachite and some azurite; areas of unaltered metal.

Chou dynasty. Length 6¾ in. (.171 m.); weight 15 oz.

(A. G. W., J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

In the central part of this fragmentary axe head is a hole $\frac{11}{16}$ in. in diameter, and around this are cast degenerated dragon forms in intaglio with the eyes in low relief. Two narrow holes at the back probably received thongs for hafting, and a small round hole in the *nei* may have held a transverse pin to help strengthen the joint. At the back of the *nei* is a field of deep intaglio within which are raised lines in the form of a *t'ao-t'ieh*. Here, as in 34.9, an original inlay of some sort was probably used.

The iron cutting edge of this axe was attached to the bronze head by the mortise and tenon method. The head formed the mortise into which the tenoned blade was set, after which, presumably, they were firmly joined by either brazing or welding. If it could be determined that the group of weapons discussed here are of so early a period as that of Ch'êng Wang, as the inscription on No. 34.6 suggests, it would constitute one of the earliest known uses of iron in China.

34.11 Blade of the type *ko*.

Decorated with casting in relief. Point broken off, split, and heavily covered with rust. Patinated with malachite and azurite; areas of unaltered metal.

PLATE 48

34.5 Blade of a weapon.

Socketed and pierced for hafting. Decorated with casting in relief on the socket. Patinated with malachite and some azurite; areas of unaltered metal.

Chou dynasty. Height 7$\frac{5}{16}$ in. (.186 m.); weight 1 lb. 6 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The blade is roughly triangular in shape with a rounded point. Along the back edge is a thin flange to be set into a grooved haft; three vertical holes are provided to receive thongs for strengthening this joint. Above this is a socket, ovoid in section, to hold firm the top of the haft. The socket is cast in the form of a feline head with ears, eyes, and gaping jaws with four fangs of which the upper set close inside the lower (cf. 34.3). Inside the fangs is a hole by which a pin could be driven through the top of the haft. The curious face of this animal has the ears and eyes in a normal horizontal position while the jaws open directly below them, and the nostrils have a proper relationship to the mouth but not to the eyes and ears. On the back of the blade, near the lower jaw of the beast, a flat circular depression $\frac{11}{16}$ in. in diameter x $\frac{1}{32}$ in. deep appears on either side. This may originally have held an inlay of some sort, either paste or a disk of semiprecious material like mother-of-pearl (cf. 34.8). If this blade is not unique in form, it is certainly rare, as no published examples resemble it in detail. Though not tanged to pierce the haft, it might be considered as a type of *ko* in which the curve between the *yüan* and the *hu* has not been fully formed.

34.8 Blade of the type *ko*.

Decorated with mother-of-pearl inlay. Patinated with malachite; areas of unaltered metal.

Chou dynasty. Length 11$\frac{9}{16}$ in. (.293 m.); weight 1 lb. 4 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The present example has two holes in the *hu*, and the cutting edge is cast with a concave bevel. On each side of the *yüan* is inlaid a flat ring of mother-of-pearl, and two curving pieces of the same material are inlaid on either side of the *nei*.

34.9 Blade of the type *ko*.

Decorated with casting in relief. Incrusted with malachite and some azurite patination.

Chou dynasty. Length 11 in. (.280 m.); weight 1 lb. 3 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3). This *ko* has a broad *yüan* with a rather blunt point. The *hu* is normal with two holes; and the back end of the *nei* curves downward at a slightly oblique angle. Behind the part presumably covered by the haft it is decorated with raised lines in a deep intaglio field, indicating that it may have been inlaid with paste, or with bits of semiprecious stone (cf. 34.5, 34.8, 34.10). At the back of the *yüan*, on each side, is a small highly stylized mask cast in sharp relief. *Nei* of this type occur on *ko* found at An-yang but apparently always on those lacking the developed *hu* (**1**, pt. 3, pls. 6-8). 39.39 and 39.40 are of similar type with the inlay—in this case turquoise—intact.

Chou dynasty. Length 7$\frac{3}{16}$ in. (.183 m.); weight 13 oz.

(A. G. W., J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

This *ko* with a single thong-hole and totally lacking any *hu* is of the type generally considered to represent an early stage in the development of this weapon. What remains of the blade is elliptical in section and has dragon forms sharply cast in low relief on both sides. A hole $\frac{3}{16}$ in. in diameter pierces the back end of the *yüan*. Thin bits of wood from an old haft adhere to one side of the *nei*, and at the back end of this member a small dragon is cast in relief in an intaglio field on each side. It is possible that the fossae in this design once carried an inlay material of some sort, though the raised lines are broader here and not so obviously made for that purpose as on 34.9 and 34.10.

This weapon is reinforced with an iron core, which accounts for the accumulation of rust at the broken end. This reinforcement, the added weight it gives, and the sharpened cutting edge make it apparent that this was a real weapon, and not a ceremonial one. Here again, as with No. 34.10, the question of age of this *ko* and its relation to the early use of iron in China is important as possibly suggesting an earlier use of that metal than encountered heretofore.

34.13 Blade with tubular socket for hafting.

Patinated smoothly with malachite showing traces of textile wrapping.

Chou dynasty (?). Length 5⅛ in. (.129 m.); weight 10.5 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The tubular socket has a surrounding band in relief near the top and two similar bands near the bottom. Two small concentric circles in relief appear on either side of the blade just where it joins the socket, and at the back of this member is a small, blunt vestigial tang. A small hole through both sides of the socket below the uppermost band must have received a transverse pin to fasten the haft in place.

While small axes with tubular sockets have come from China, they do not appear to belong among the indigenous bronze-age products of that country. They are rather associated with the nomadic peoples of the marginal regions to the north and west; and similar objects occur as far away as the Danube. Numerous examples have been published (**92**, vol. 1, Nos. A145, A151; **3**, pp. 240–242, pl. 10; **4**, pl. 6; **19**, pl. 3; **48**, pl. 2; **81**, p. 26, pl. 8, 31). With the exception of those published by Martin, which were found in the Yenisei Valley in Siberia, and the Halstatt examples cited by Janse for purposes of comparison, the provenance of these objects is uncertain. Most of them were bought in North China, and belong to that group of objects loosely known as Ordos bronzes because many of them purport to come from that region north of Shensi. It should be noted, however, that even when finds of objects of this type are definitely recorded, this information is not conclusive evidence of anything in particular. The makers were members of various nomadic tribes who, through the centuries, wandered back and forth over thousands of miles of territory; and weapons or other objects might be lost or discarded at any point

in the steppe country, leaving no indication of where they were made or which particular people made them.

34.12 Small blade.

Patinated with malachite, azurite, and cuprite.

Chou dynasty (?). Length 3$\frac{3}{16}$ in. (.081 m.); weight 2 oz.

(J. A. P., 1944.) One of a group of 12 weapons said to have been found at Hsün-hsien, Wei-hui-fu, Honan Province (cf. 34.3).

The short, pointed blade has a rounded longitudinal ridge on each side. The socket is rectangular both in outline and in section; a hole in each side probably received a transverse pin to secure the haft.

Areas near the tip are free of patination and show signs of grinding and filing. It may be that this was once a longer blade that was broken off and subsequently filed down to a fresh point. It would seem, however, that it could not have been much longer, as the size and thinness of the socket were obviously not designed to support a weapon or tool of any great size or destined for heavy work. Whatever it may have been, it is an unusual form, and nothing like it has yet been found in published repertories of bronzes. Neither the stubby blade nor the rectangular socket appears to have any relatives in the field of Chinese bronze weapons.

Plate 49

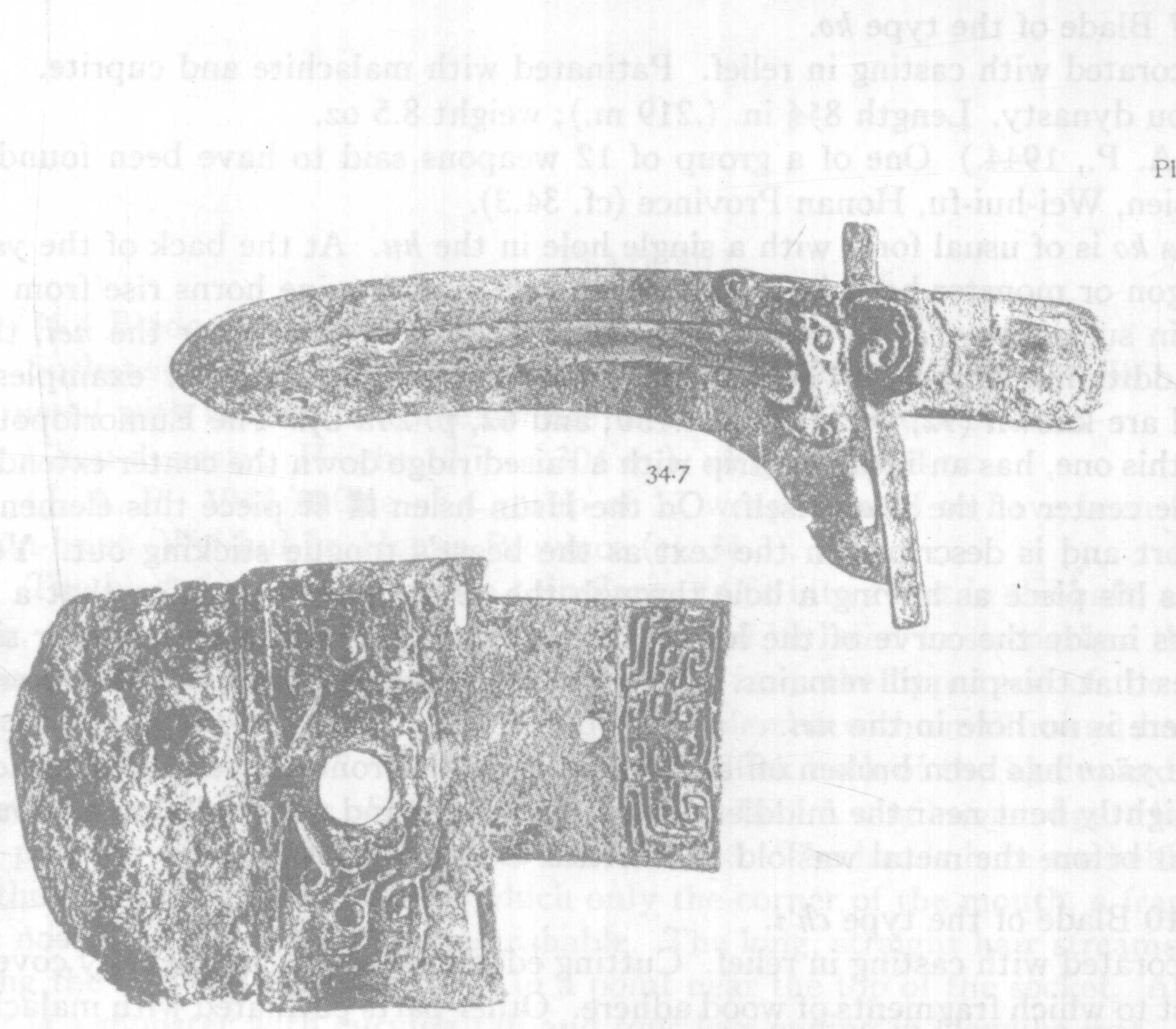


Plate 50

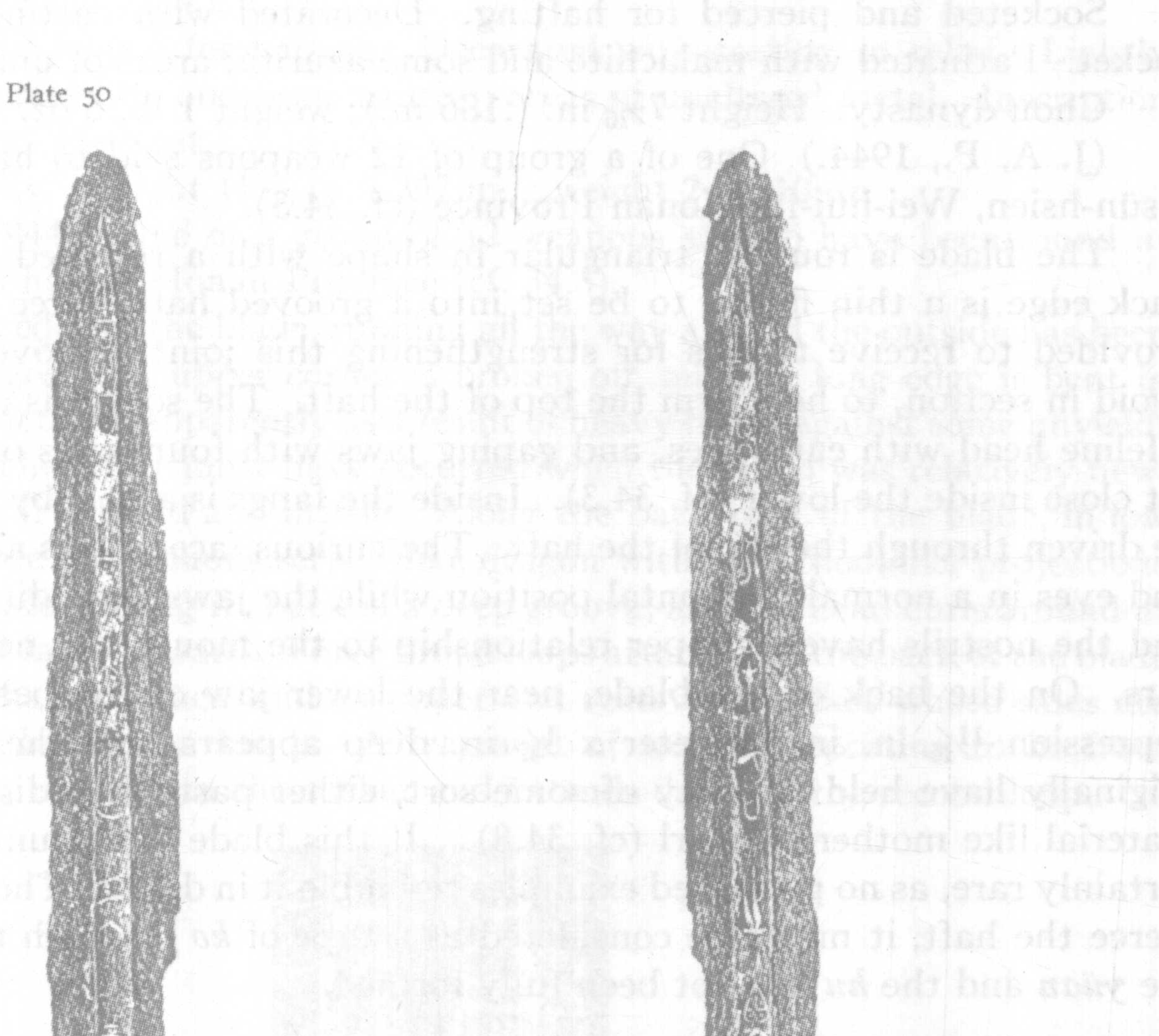


PLATE 50

29.19 Sword of the type *chien.*

The edges foliated and heavily incrusted; areas elsewhere of light green aerugo. The pommel inlaid with a gold ornament, the guard with gold and turquoise, the center of the blade on both sides with inscriptions inlaid with gold.

Ch'in dynasty. Length $21\frac{5}{8}$ in. (.550 m.). Diameter of pommel $1\frac{5}{8}$ in. (.041 m.).

(A. G. W., 1944.) The resemblance between this sword and one found at Li-yü-ts'un 李峪村 has been noted several times (**31**, p. 29a; **32**, pp. 240–241; **55**, p. 70); also some account of the find is given under 32.13.

The inscription is composed of 20 characters and is inlaid on the fuller of the blade with 10 characters on either side. The inscription occurs as follows:

Obverse: 吉日壬午作爲元用玄鏐.

Reverse: 鋪呂朕余名之謂之少〇.

This may be rendered, "On the lucky day *jên wu*, made for righteous use. Pure gold covers the spine. I myself have named it calling it Little ——." Kuo Mo-jo makes a good deal of difficulty over the first two characters of the reverse inscription (**32**, p. 241). He reads the first as *po* 鎛, which is possible, and the second as *lü* 鋁 meaning 鑢. This seems unnecessary. The first character is also readable as *p'u* 鋪 "to spread out" or "to cover," and the second as *lü* 呂 in its original *Shuo wên* meaning of "spine," referring, of course, to the spine of the sword which is covered by the inscription in gold.

It is worth noting that the character *chên* 朕 was a common word for the pronouns "I" and "me," but was appropriated by Ch'in Shih Huang Ti 秦始皇帝 for the royal We, Ourself. Insofar as the last character is concerned, it has been suggested that it is a form of *shih* 矢, "arrow," and certainly the lower part of it resembles a Chou dynasty arrow head.

INDEX*

* Index prepared by Mrs. William Mayer, who also assisted in reading proof of the book.

CATALOGUE

CHINESE BRONZES (BEING CHIEFLY CEREMONIAL VESSELS)

PERIODS: SHANG: TILL 1028 B.C.; EARLY CHOU: 1027 — CA. 900 B.C.; MIDDLE CHOU: CA. 900 — CA. 650 B.C.; LATE CHOU: CA. 650 — CA. 220 B.C.; HAN: CA. 220 B.C. — 220 A.D.

PLATE 1 No. 1. LI

Shang period. Leaden coloured glossy and light green dull patination. H. 15 cm.
An excellent specimen of its type. Inscription (by Prof. Karlgren): the two top characters are generally identified as s h u which means both „uncle" and „3rd of 4 brothers". Below: „Father". Meaning of course quite obscure.
Lit.: **7** (No. 10); **50** (p. 27, No. 164); **60** (Pl. XI); **74** (Febr. 1929, ill. on p. 38); **89** (No. 469); **107** (No. 4, Pl. 1).
Dr. J. W. Frederiks coll., The Hague.

PLATE 2 No. 2. TING

Shang period. H. 22 cm.
Inscription (by Prof. Karlgren): the contents of the y a h i n g unidentified. Below: „Father Ki".
Private collection, Holland.

PLATE 2 No. 3. LI-TING

Shang period. Malachite green, reddish brown, purple, moss green, leaden coloured and brown dull and glossy patination. H. 19 cm.
One of a pair; the other vessel formerly(?) in the Hardt coll., Berlin. These Li-Ting belong to the best early Chinese bronzes in European collections. Inscription (by Prof. Karlgren): probably a sacrificial knife. Below: „Father Ting".
Lit.: **50** (p. 29, No. 256); **62** (p. 22, Pl. 6b); **71** (No. 183); **72** (Pl. 2, No. 183); **74** (Nov. 1930, p. 349 sqq.); **89** (No. 470, Pl. 29); **107** (No. 2).
W. van der Mandele coll., Bloemendaal, Holland.

PLATE 3 No. 4. YU

Shang period. Dark green glossy patination. H. 21 cm.
A classic specimen with an extraordinarily solid patination, the nature of which makes it probable that this vessel was not unearthed but has been kept indoors for centuries.
Lit.: **7** (No. 2); **50** (p. 40, No. 492); **89** (No. 475); **106** (No. 35, Pl III); **114** (Pl. IV/V).
Mrs. C. G. Verburgt coll., The Hague.

PLATE 4 No. 5. KU

Shang period. Dark and light green glossy and dull patination. H. 32.5 cm.
A magnificent specimen of this well known category of classic bronzes. It is very instructive to compare this vessel with such an excellent Ku as is illustrated and described in **37** (Pl. 10). Note the slightly concave middle part of the Freer vessel, in contrast to the straight corresponding part of this Ku. Also, the differences in the décor are noteworthy, e.g. the cicadas on the top of the foot of the Freer Ku, compared with the fabulous animals adorning the same part of the Minkenhof vessel. Eyes on the blades of the top part of our vessel, not occurring on the Freer Ku (which is also inscribed). The latter is about 4 cm. shorter than the Minkenhof vessel. Inscription inside the hollow foot (by Prof. Karlgren): in the earlier repertories this was deciphered as Tan (Giles, Chin.-Engl. Dict., 2nd ed. 1912, No. 10600) but of unknown meaning as an inscription. Modern authors like Jung Keng register this character as undecipherable.
S. H. Minkenhof coll. (formerly a loan in the Metrop. Mus. of Art, New York).

ASIATIC ART

in private collections of Holland and Belgium

by

H. F. E. VISSER

Curator, Museum of Asiatic Art
and Municipal Museums, Amsterdam

"DE SPIEGHEL" PUBLISHING CO. - AMSTERDAM - HOLLAND

PLATE 5 No. 6. KU
Shang period. Light green glossy and light green and brown dull patination. H. 31.5 cm.
Very good specimen of the well known type of Ku.
Lit.: 89 (No. 481).
W. van der Mandele coll., Bloemendaal, Holland.

PLATE 6 No. 7. KU
Shang period. Olive green glossy patination. H. 24.5 cm.
As far as its décor is concerned, a rather rare specimen of Ku. Moreover the olive green shade of its patination is seldom seen in Shang bronzes.
Lit.: 89 (No. 499); 107 (No. 3).
W. van der Mandele coll., Bloemendaal, Holland.

PLATE 7 No. 8. CHIA
Shang period. Light green dull patination. H. 24.5 cm.
Inscription on the inside of the bottom (by Prof. Karlgren): except the y a h i n g no safe interpretation. Inside the y a h i n g there m i g h t be t z'ŭ (Giles etc. — see No. 5 — No. 12382) „the second in the series".
Private collection, Holland.

PLATE 8 No. 9. CHÜEH
Shang period. Light green glossy and dark green and reddish brown dull patination. H. 18.5 cm.
Inscription under the handle (by Prof. Karlgren): T s ï „son".
Lit.: 50 (p. 60, No. 981); 89 (No. 483); 107 (No. 6).
W. van der Mandele coll., Bloemendaal, Holland.

PLATES 9 No. 10. CHÜEH
10 Shang period. Light green and black glossy patination and malachite green and reddish brown dull patination. H. 21.5 cm.
The inscription consists of two characters. The second can be clearly seen under the handle, of the first only a part is visible. An elegant specimen of this class of vessels. Inscription (by Prof.Karlgren): the other repertories decipher the character under the y a h i n g as k u n g „bow". But modern authors like Jung Keng register it as undecipherable.
S. H. Minkenhof coll.

PLATE 11 No. 11. KUEI
Shang or Early Chou period. Light green and pastel blue dull patination. H. 15 cm.
Inscription (by Prof. Karlgren): „Po T'eng has made the precious vessel".
Private collection, Holland.

PLATE 11 No. 12. KUEI
Shang or Early Chou period. Dark greyish green and rust brown glossy patination. H. 17 cm.
Inscription (by Prof. Karlgren): this important inscription I have not found in any of the repertories I know. I cannot decipher it all, there being several obscure characters, but it starts:
„In the 3rd month, 1st quarter, on the day y i-m a o, the king was in Chou; at daybreak he went to the Great Room (sc. in the temple). Nan-kung Shu entered the door . . ."
This Nan-kung Shu might be some relative (younger brother?) of the Nan kung Chung who occurs on the earliest Chou vessels in my „Yin and Chou" (B 1—8), though from the ductus and regularity of the script I should deem it somewhat later.
Private collection, Holland.

PLATE 12 No. 13. CHIH
Shang period. Greyish green and red dull patination. H. 17,5 cm.
Inscription inside bottom and inside cover (by Prof. Karlgren): „The son Kuei" . . . + (undecipherable).
Lit.: 7 (No. 18); 50 (p. 58, No. 924); 62 (p. 44, Pl. 19b); 71 (No. 255); 72 (Pl. 16); 74 (July 1929, p. 231); 89 (No. 493); 107 (No. 9).
W. van der Mandele coll., Bloemendaal, Holland.

PLATE 12 No. 14. CHIH
Shang period. Greyish green and light brown glossy patination. H. 18 cm.
Similar owl décor on a „fang i" in the collection of Mrs. W. H. Moore, New York (Ackerman, Ritual Bronzes of Ancient China, New York 1945, Pl. 61).
Lit.: 83a (Pl. II, 1 & 2).
Private collection, Holland.

PLATE 12 No. 15. YU
Shang period. Light green glossy and malachite green dull patination. H. 17 cm.
The form is of two owls standing back to back. This type of Yu is known in quite a number of examples.
Private collection, Holland.

PLATE 13 No. 16. CHIH
Shang period. Malachite green and pastel blue dull patination, yellowish green and black glossy patination. H. 15 cm.
A perfect specimen of its class. The austerity and balanced proportion of the design are admirable. Inscription inside bottom (by Prof. Karlgren): upper part undecipherable. Below: „Father Kia".
Lit.: 89 (No. 192, Pl. 30).
S. H. Minkenhof coll.

PLATE 13 No. 17. TSUN
Shang period. Light green glossy patination. H. 28 cm.
Inscription (by Prof. Karlgren): I believe the upper part, in spite of a missing stroke, is identical with the very common (Giles etc. — see No. 5 — No. 7893) „scribe". Below: „Father Kuei".
Private collection, Holland.

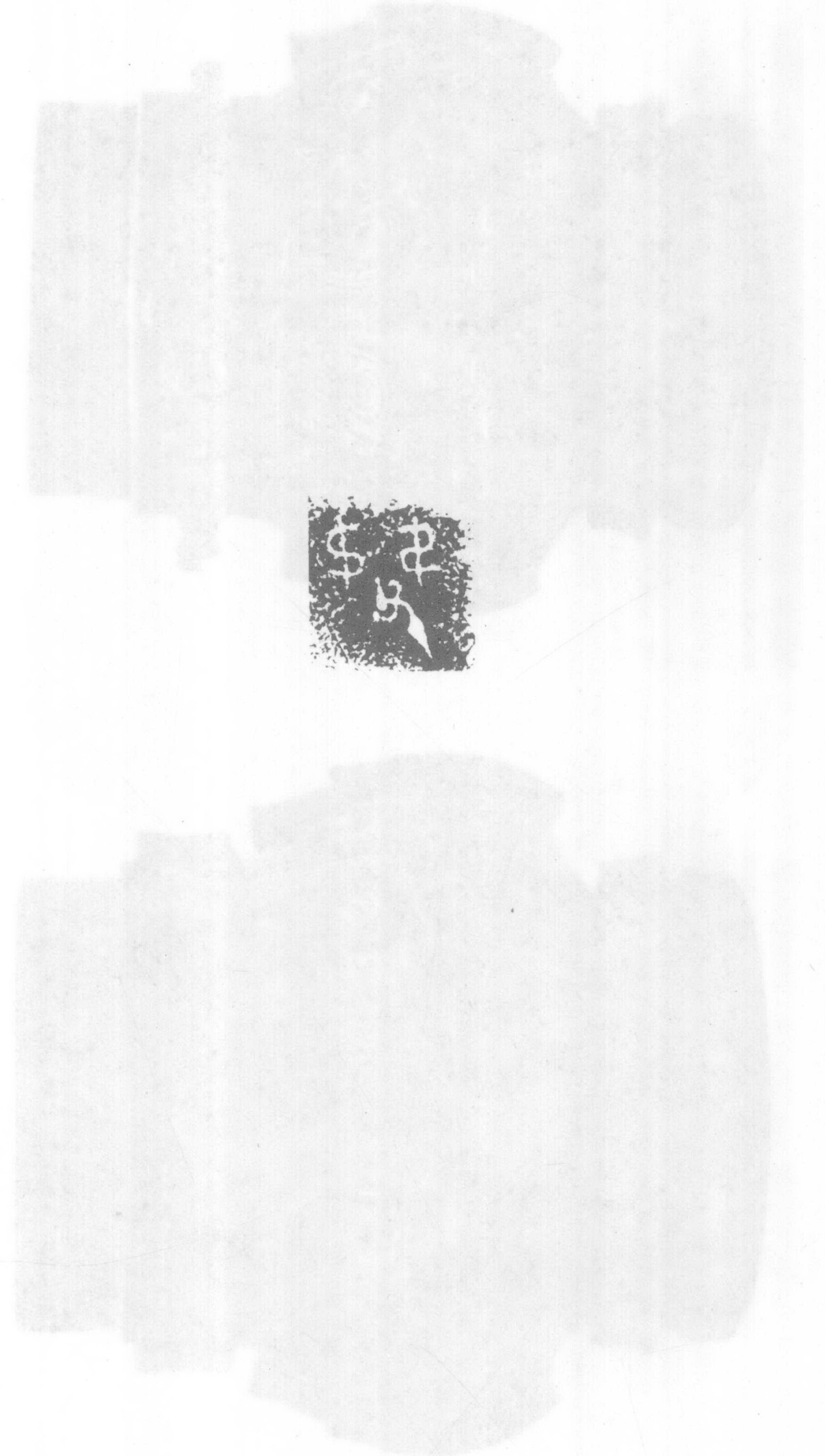
PLATE 14 No. 18. YU
Shang period. Light green glossy patination with reddish brown and pastel blue spots. H. 34.5 cm.
A beautiful balanced shape and a sober, refined design, leaving much of the surface bare. Inscription inside bottom and inside cover (by Prof. Karlgren): entirely undecipherable.
Lit.: 50 (p. 43, No. 594); 71 (No. 196); 72 (Pl. 14, with inscription); 74 (Sept. 1931, p. 285 sqq., with inscription); 89 (No. 495); 107 (No. 8).
W. van der Mandele coll., Bloemendaal, Holland.

PLATE 15 No. 19. SQUARE TING
Early Chou period. Dark green and dark greyish green dull patination with reddish brown spots. H. 22.5 cm.
Because of the „hook projections" of the flanges, here given to Early Chou. Compare 46, Ch. 2, 11. Inscription inside bottom (by Prof. Karlgren): Y a h i n g with a kneeling adorer. Below: Father Ting.
Lit.: 7 (No. 3); 17 (No. 394); 40 (p. 26, fig. 4); 49 (Pl. VII, A 12); 62 (Pl. 5); 71 (No. 200); 101 (II, 94, with inscription).
Stoclet coll., Brussels.

PLATE 16 No. 20. KUEI
Middle Chou period. Moss green and rust brown glossy (waxed) patination. H. 24.5 cm.
A similar vessel in the Berenson coll. (7, No. 8). Inscribed, but inscription erased.
Lit.: 53 (Pl. 50, B); 71 (No. 163).
Stoclet coll., Brussels.

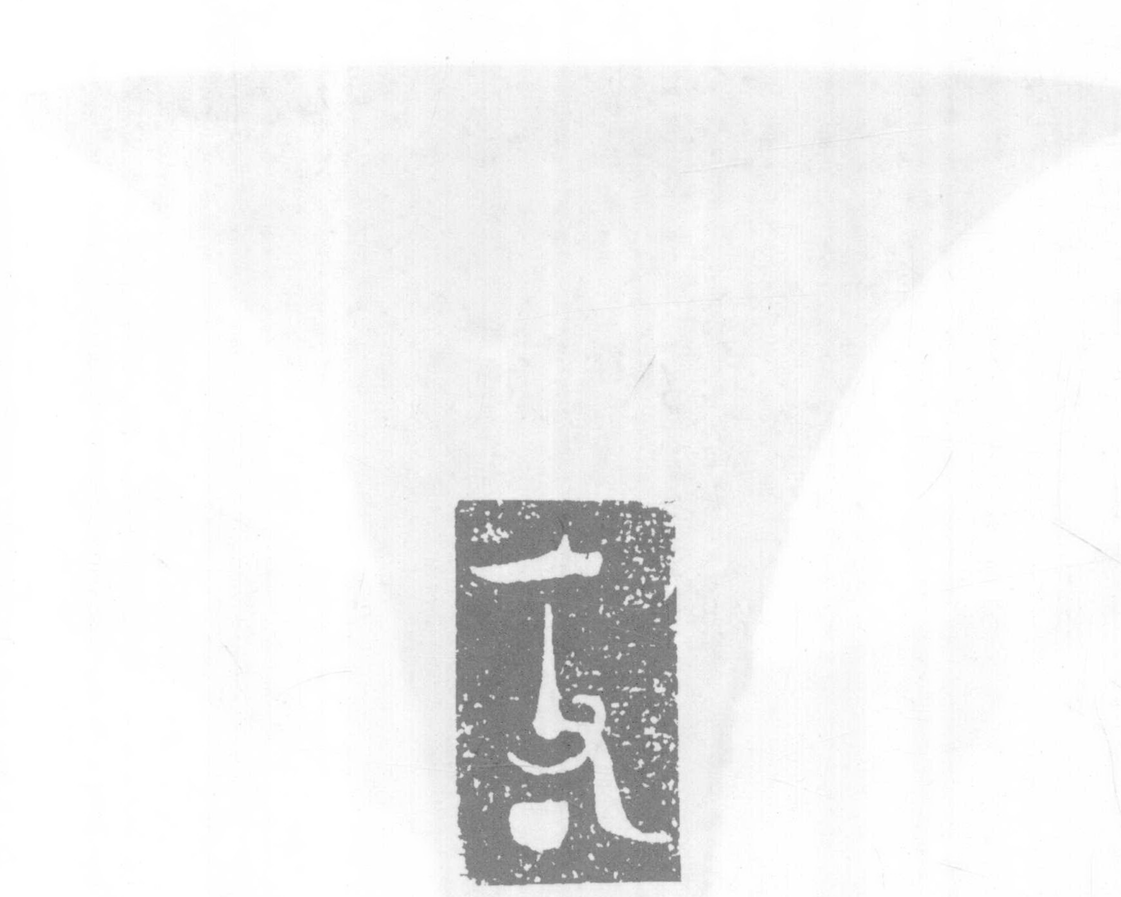
PLATE 16 No. 21. I
Middle Chou period. Light and dark green and pastel blue dull patination. H. 16.5 cm.
Similar vessels are frequent. A very important „I" with a long inscription (see Introduction, p. 13) in Rijksmuseum voor Volkenkunde, Leyden (104, No. 1, Pl. I).
Lit.: 89 (No. 502).
Prof. and Mrs. Kleiweg de Zwaan coll., Blaricum, Holland.

PLATES

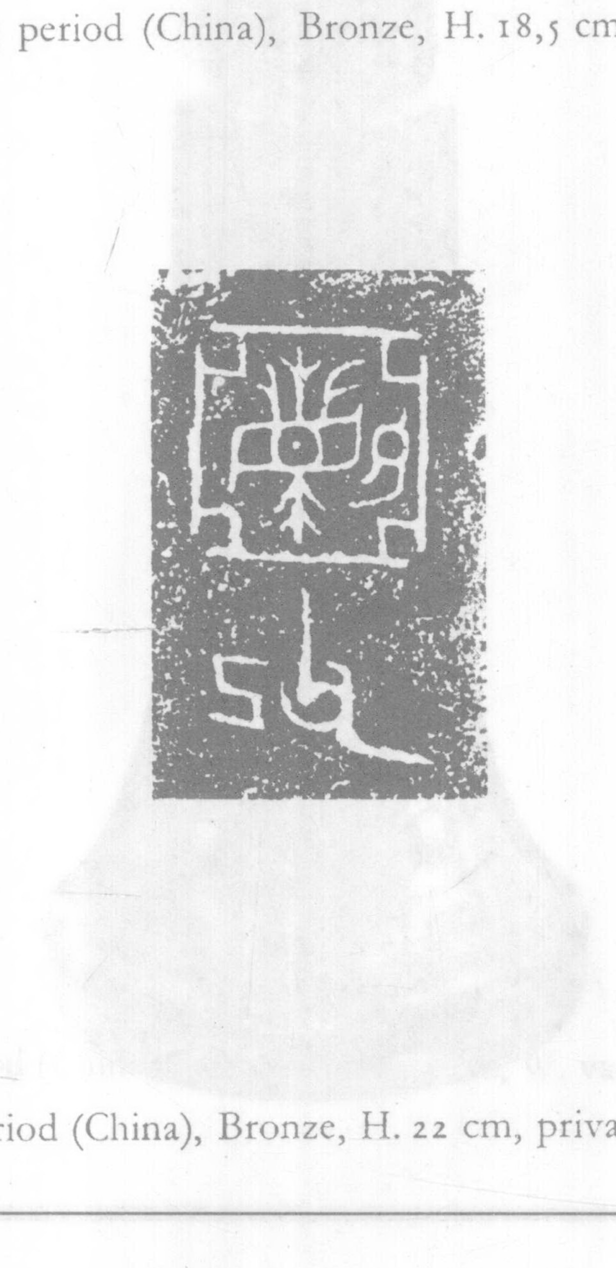


Pl. 1, No. 1, *Li*, Shang period (China), Bronze, H. 15 cm, Dr. J. W. Frederiks coll., The Hague.



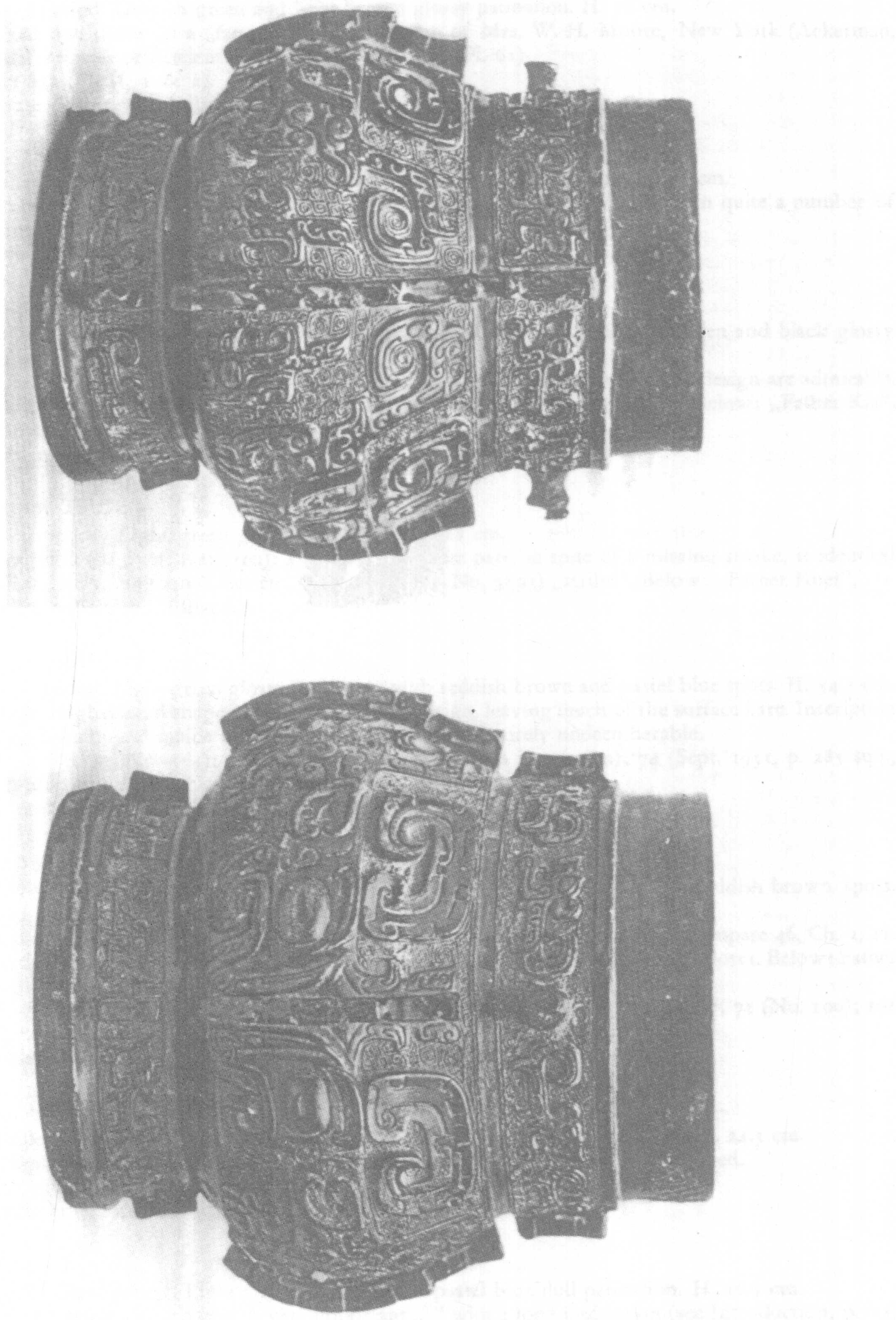


Pl. 2, No. 3, *Li-Ting*, Shang period (China), Bronze, H. 18,5 cm, W. van der Mandele coll., Bloemendaal, Holland.

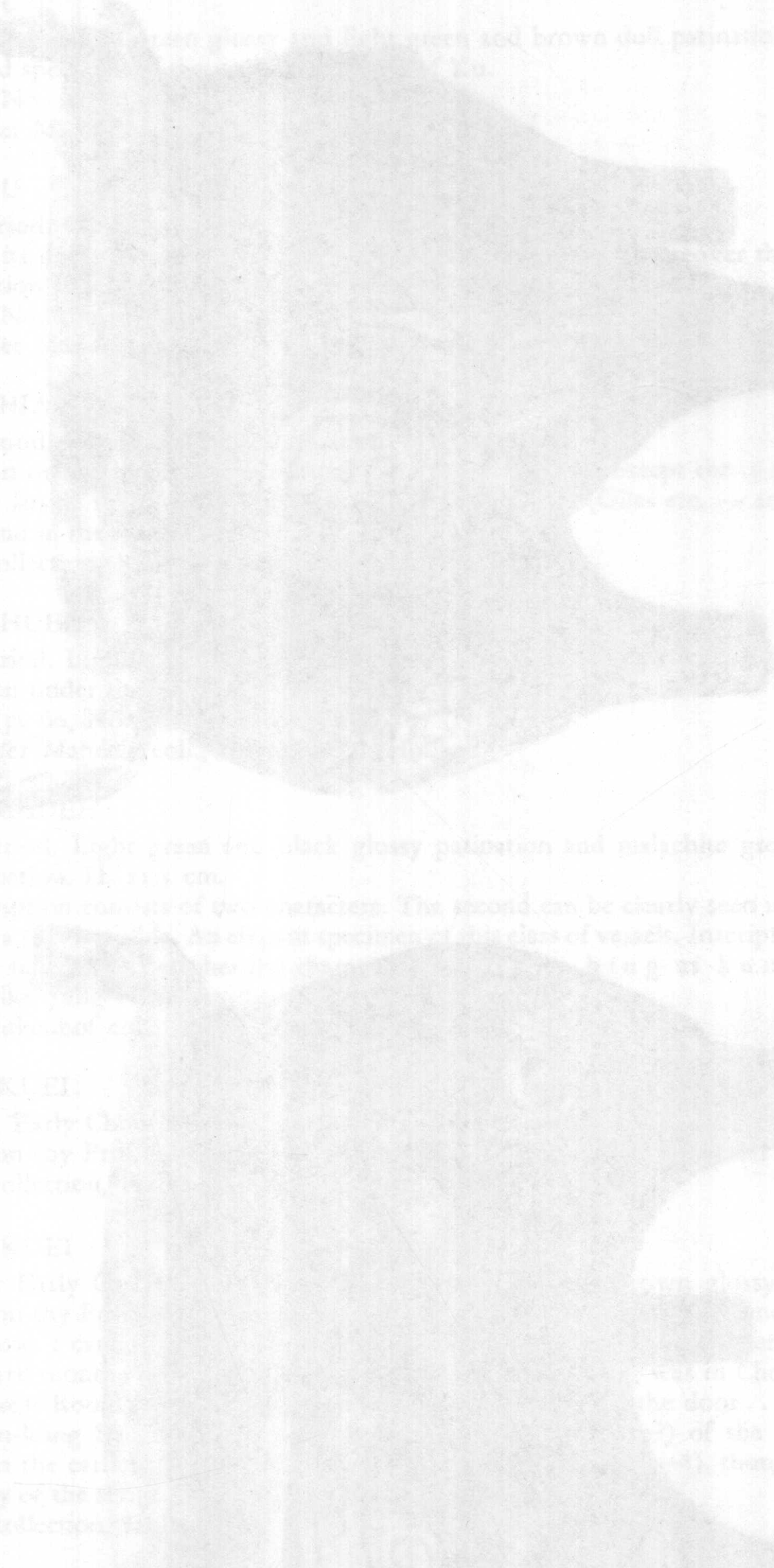


Pl. 2, No. 2, *Ting*, Shang period (China), Bronze, H. 22 cm, private collection, Holland.





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Pl. 3, No. 4, *Yu*, Shang period (China), Bronze, H. 21 cm, Mrs. C. G. Verburgt coll., The Hague.

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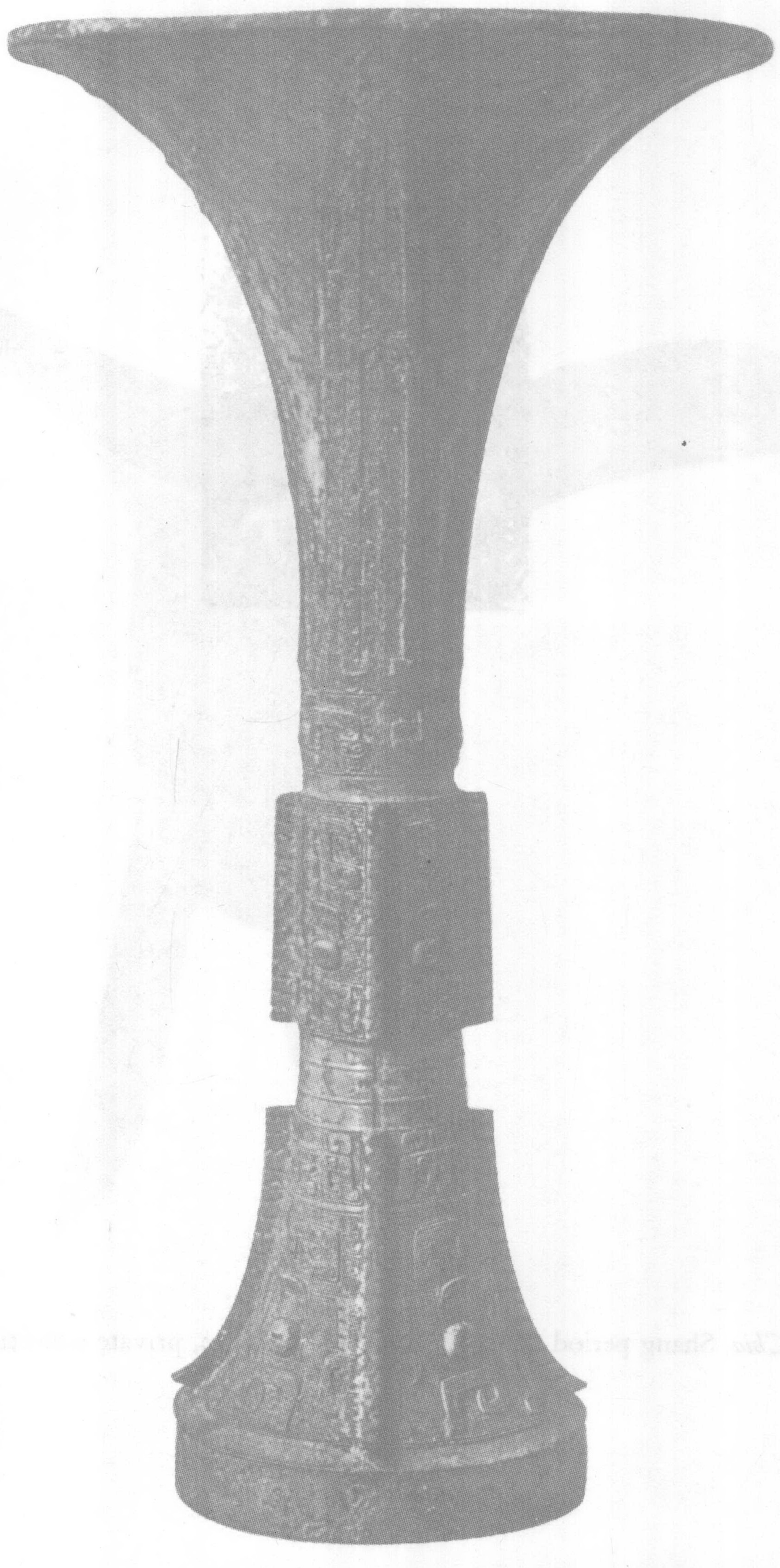


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Pl. 4, No. 5, *Ku*, Shang period (China), Bronze, H. 32,5 cm, S. H. Minkenhof coll.

88



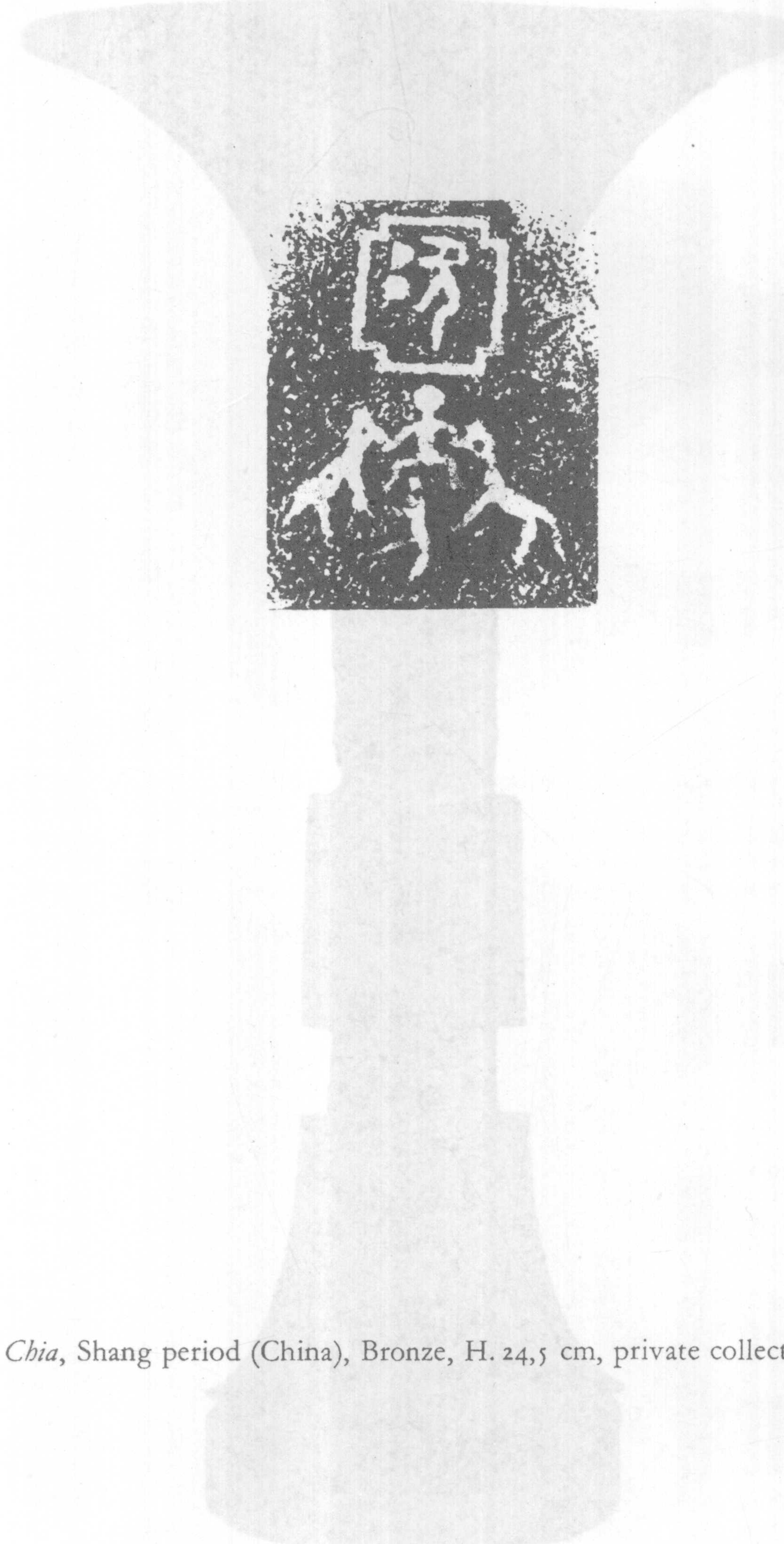
Pl. 5, No. 6, *Ku*, Shang period (China), Bronze, H. 31,5 cm, W. van der Mandele coll., Bloemendaal, Holland.



Pl. 6, No. 7, *Ku*, Shang period (China), Bronze, H. 24,5 cm, W. van der Mandele coll., Bloemendaal, Holland.



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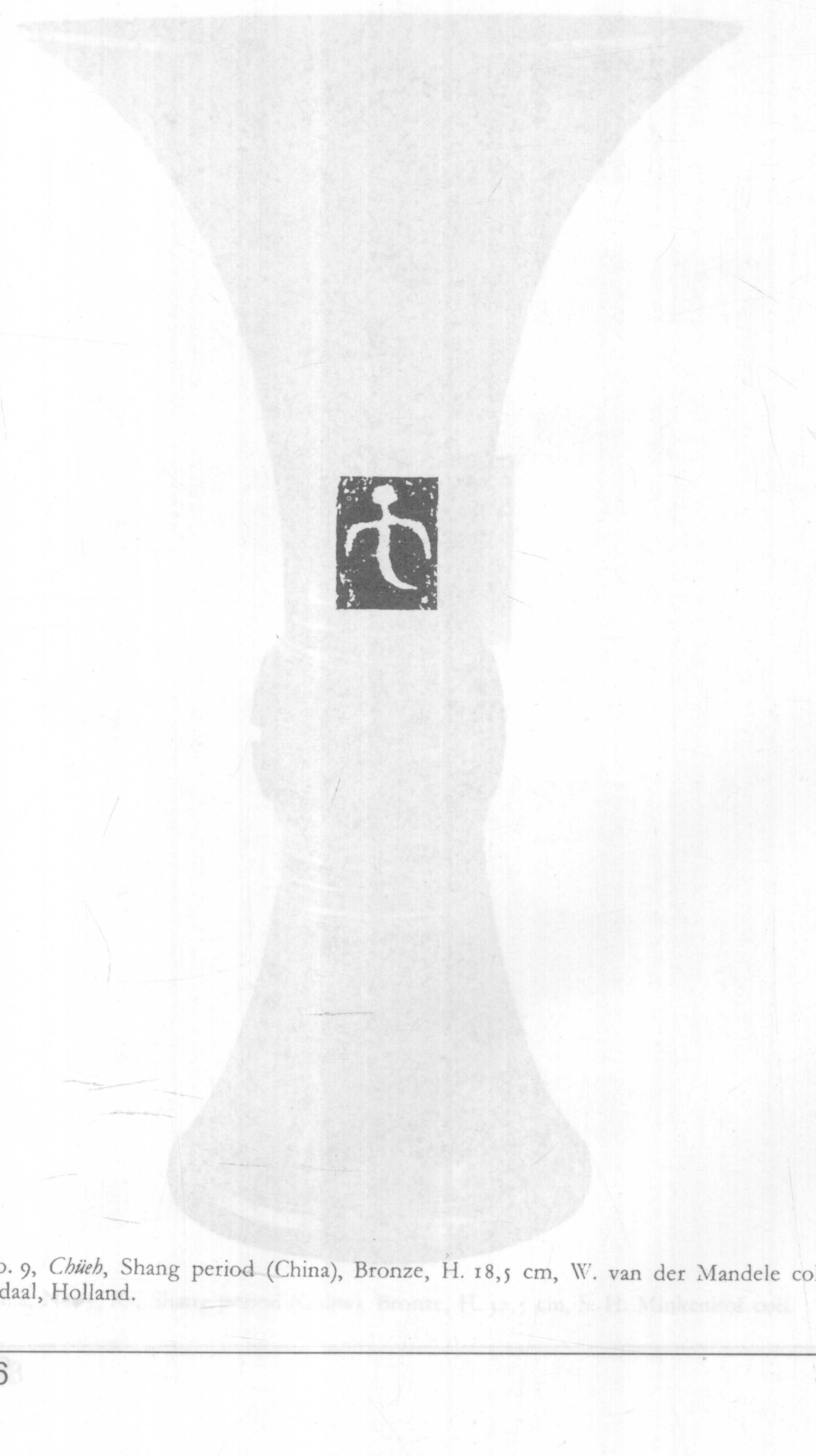


Pl. 7, No. 8, *Chia*, Shang period (China), Bronze, H. 24,5 cm, private collection, Holland.

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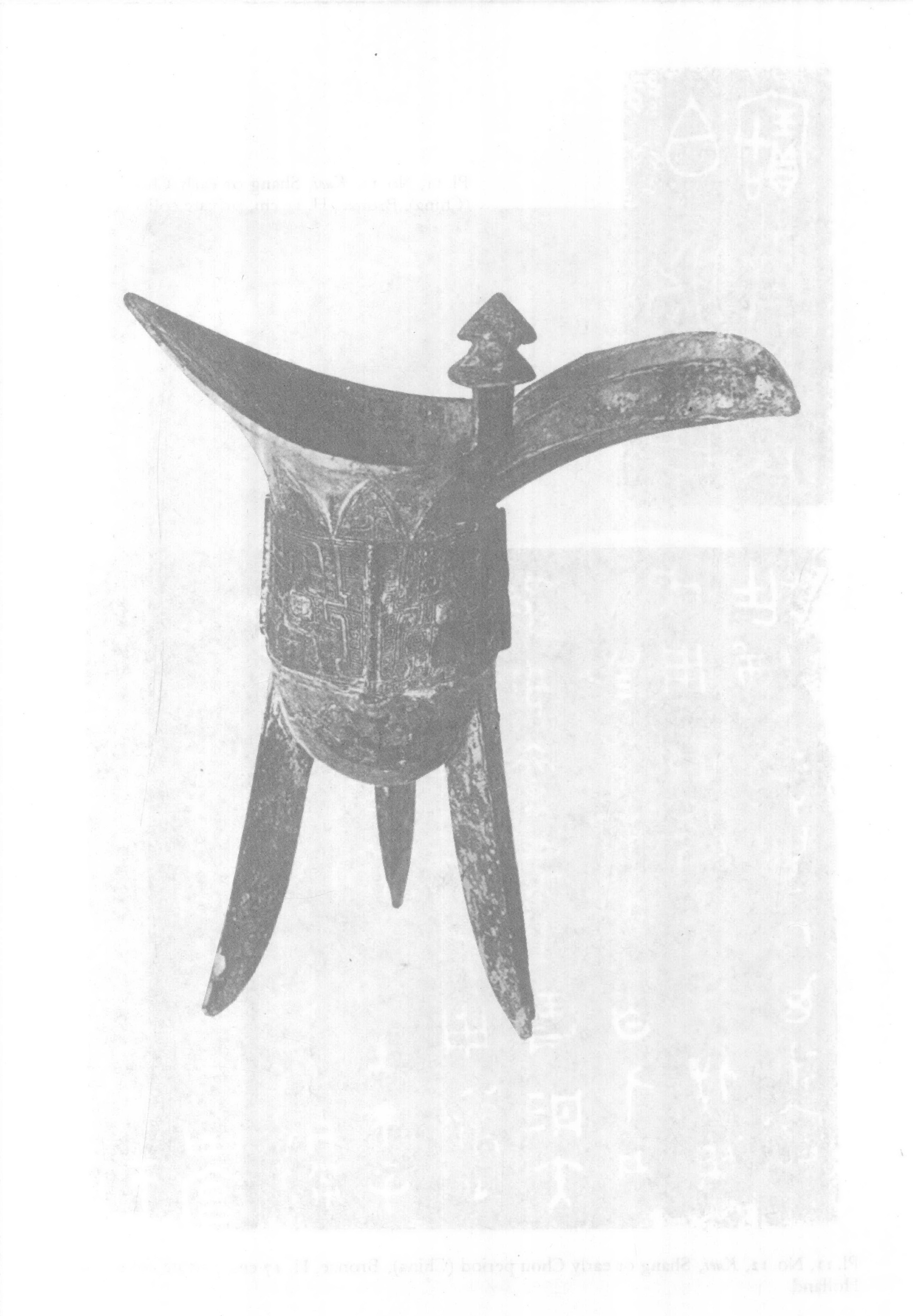


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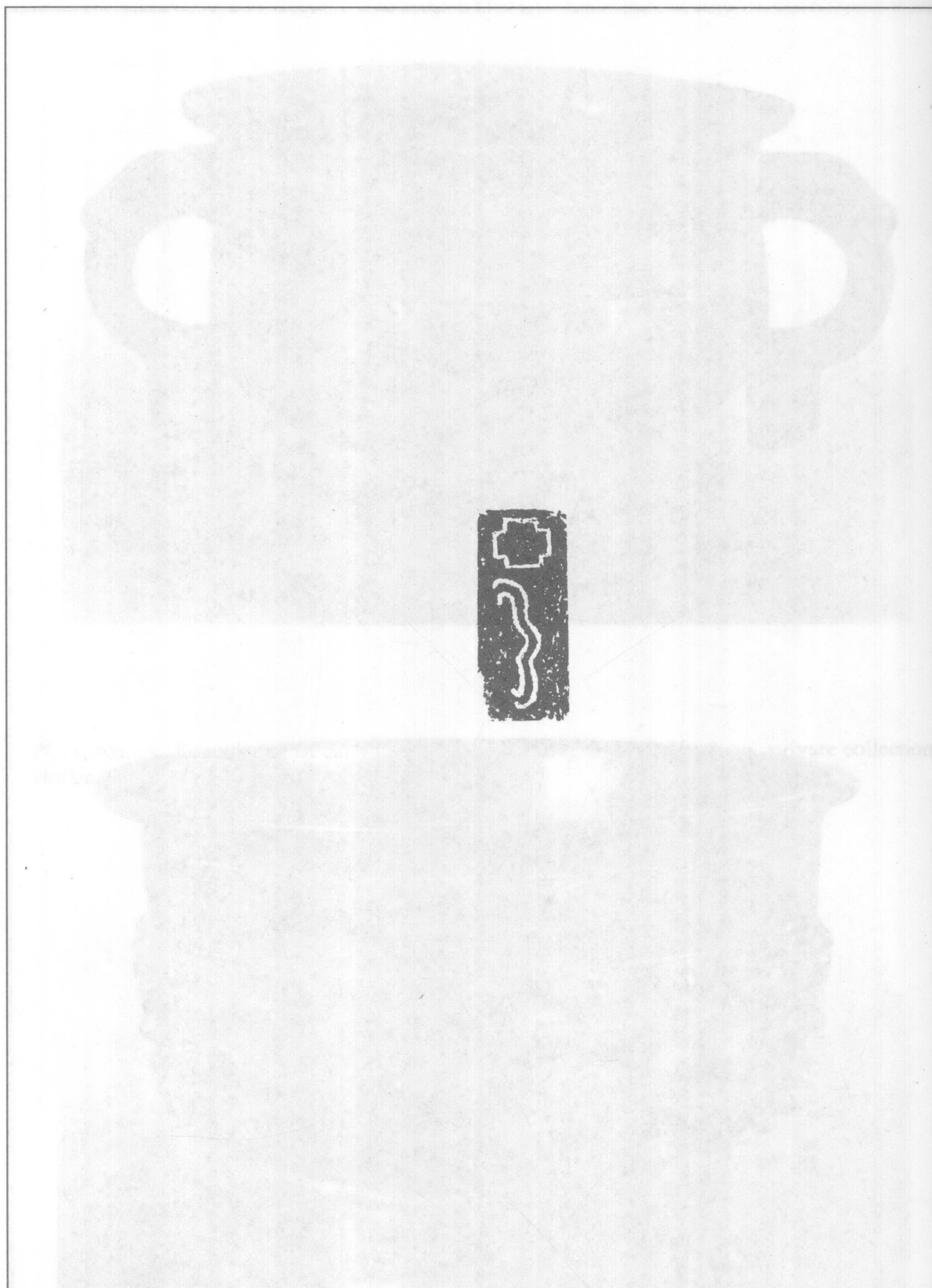


Pl. 8, No. 9, *Chüeh*, Shang period (China), Bronze, H. 18,5 cm, W. van der Mandele coll., Bloemendaal, Holland.

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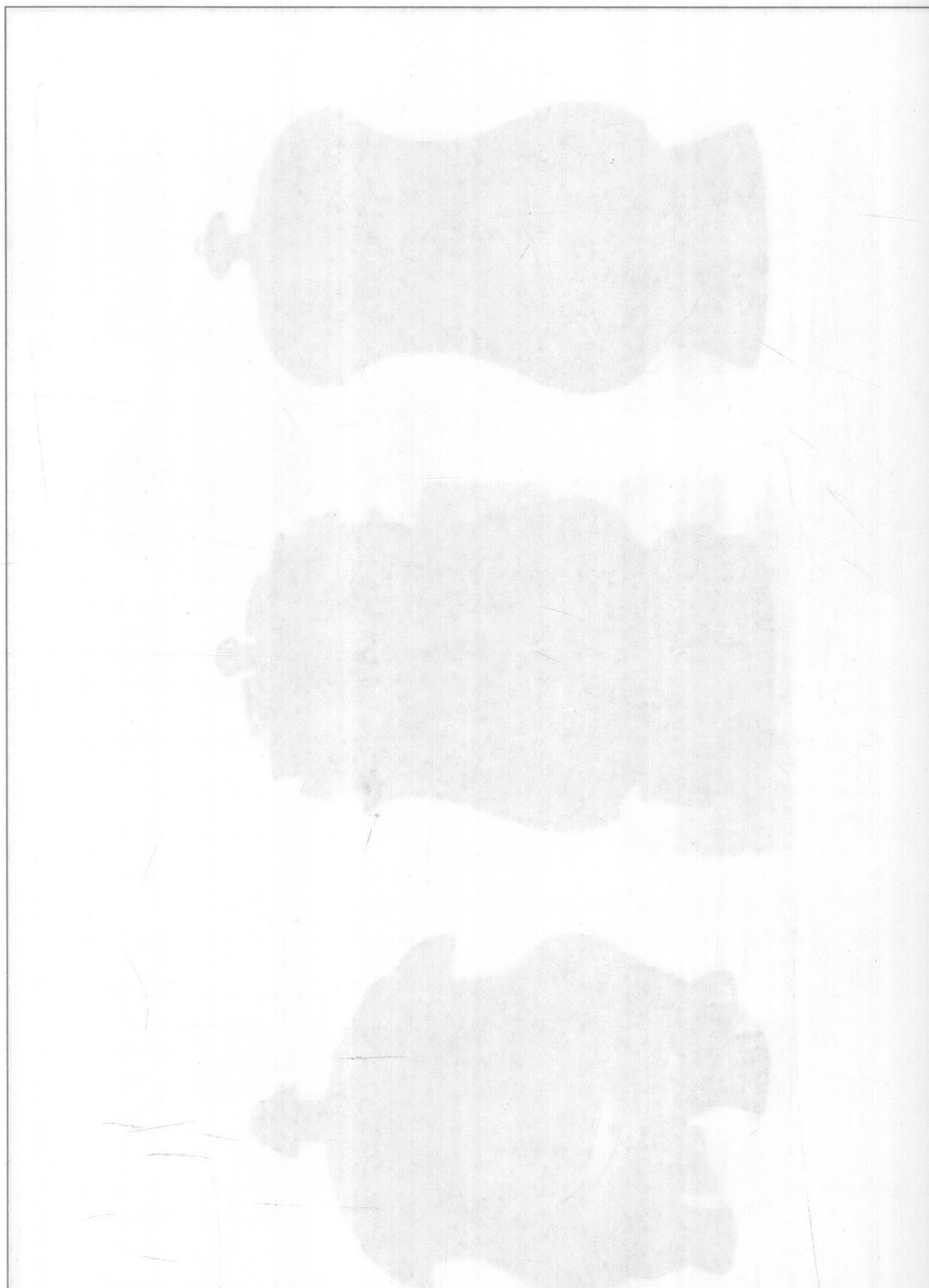


Pl. 9, No. 10, *Chüeh*, Shang period (China), Bronze, H. 21,5 cm, S. H. Minkenhof coll.

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Pl. 10, No. 10, See Pl. 9.

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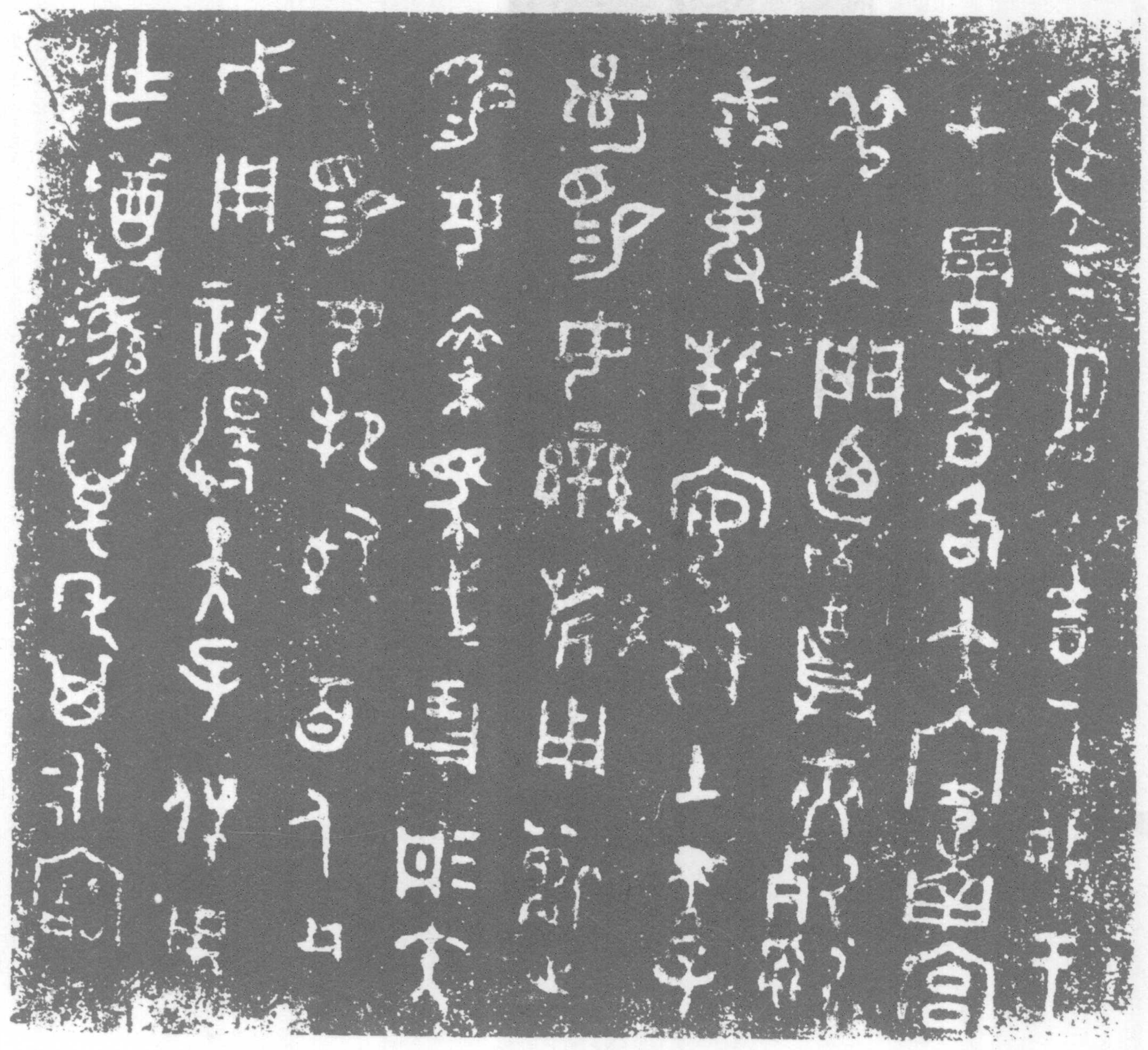




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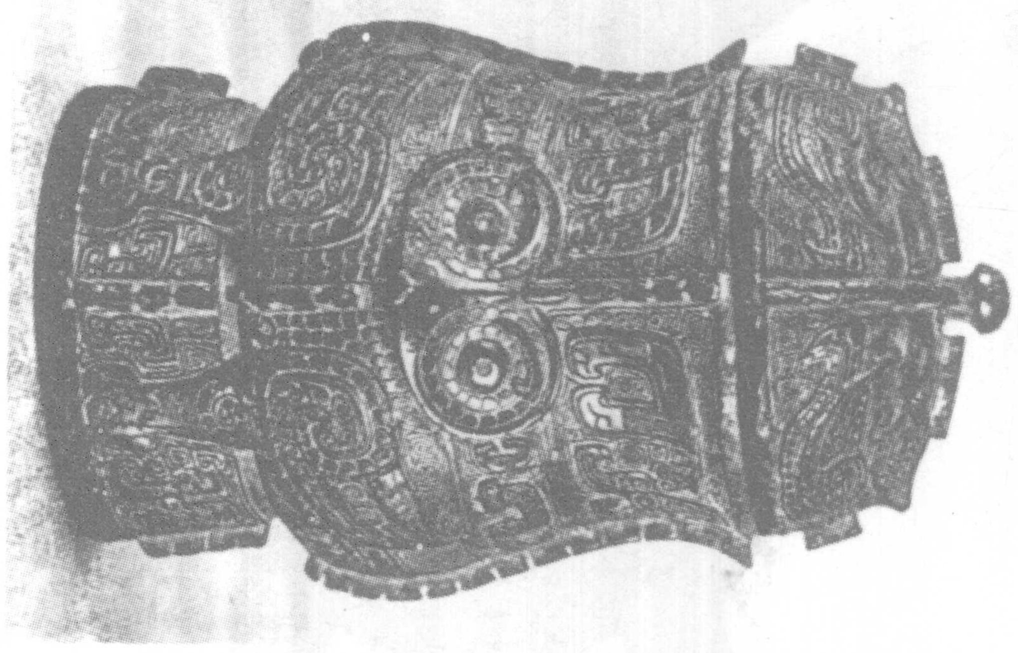
Pl. 11, No. 11, *Kuei*, Shang or early Chou period (China), Bronze, H. 15 cm, private collection, Holland.

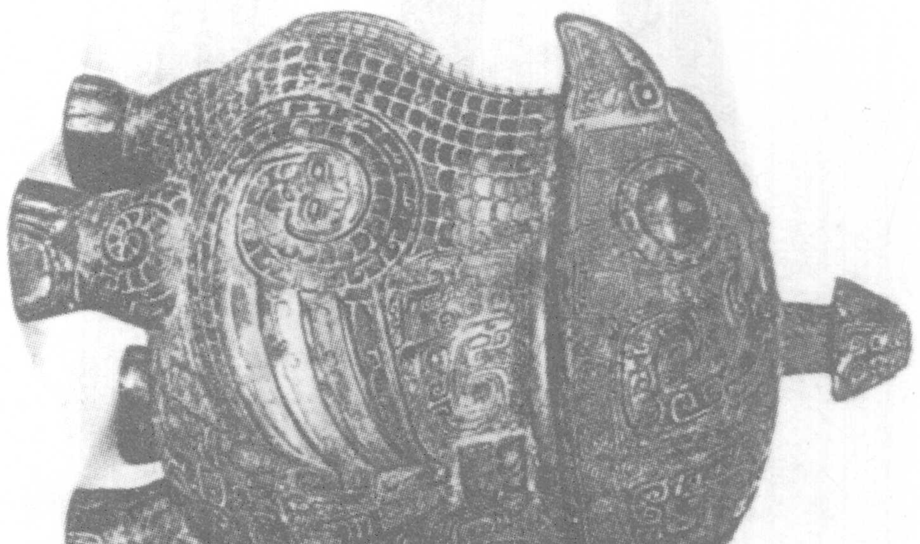


Pl. 11, No. 12, *Kuei*, Shang or early Chou period (China), Bronze, H. 17 cm, private collection, Holland.

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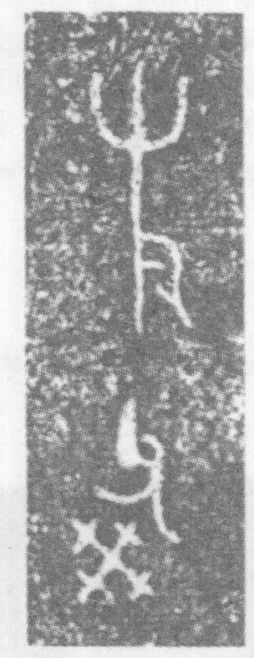
Pl. 12, No. 15, *Yu*, Shang or early Chou period (China), Bronze, H. 17 cm, private collection, Holland.

Pl. 12, No. 14, *Chih*, Shang or early Chou period (China), Bronze, H. 18 cm, private collection, Holland.

Pl. 12, No. 13, *Chih*, Shang or early Chou period (China), Bronze, H. 17,5 cm, W. van der Mandele coll., Bloemendaal, Holland.



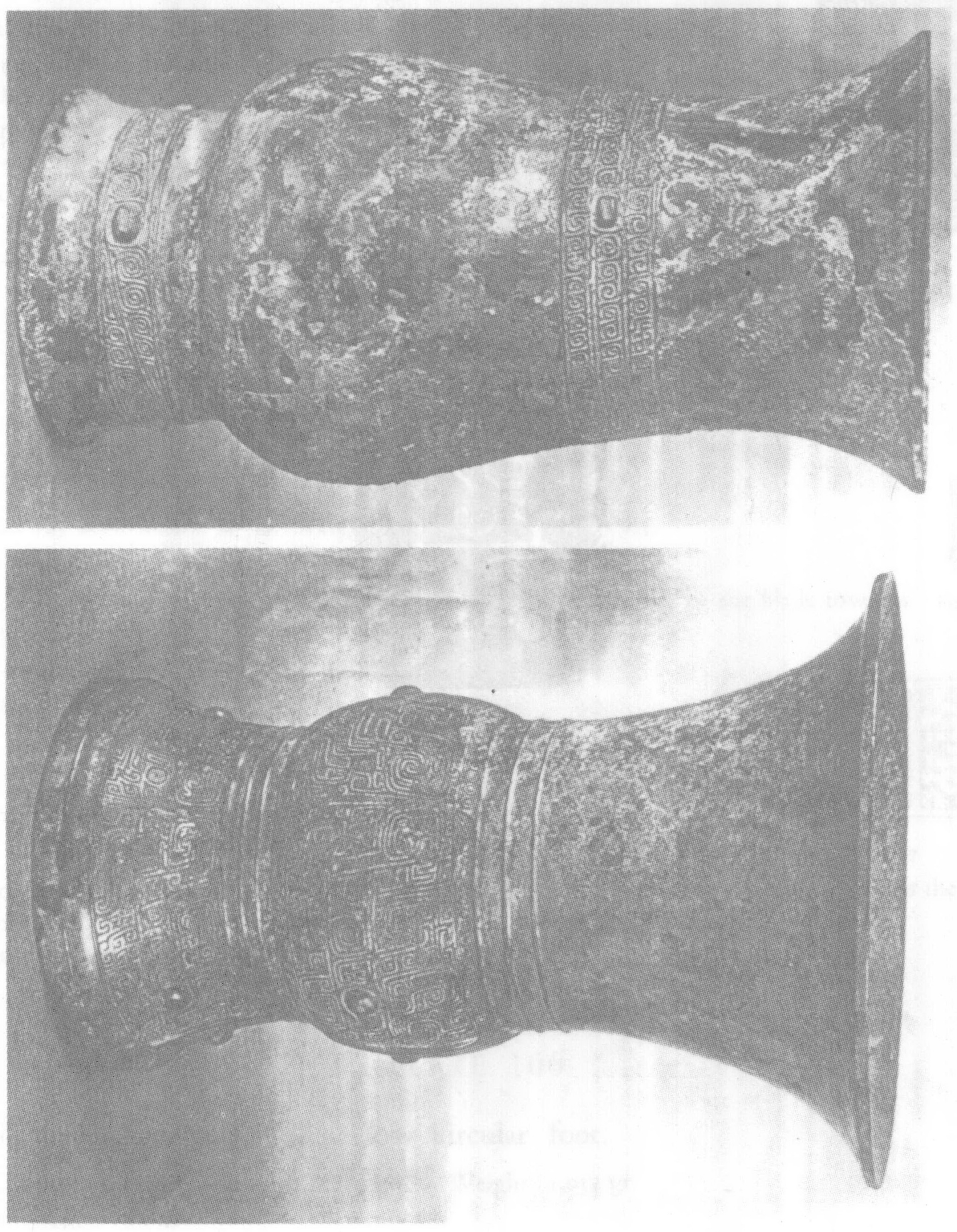
104

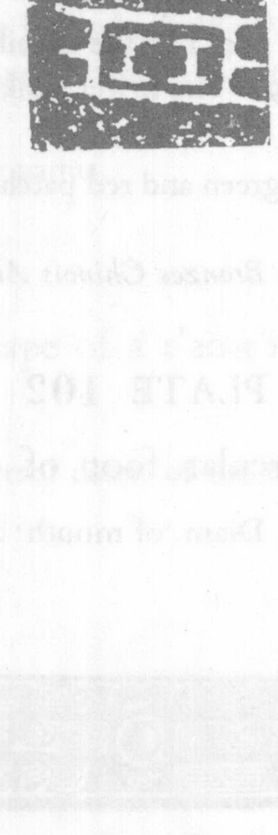


Pl. 13, No. 17, *Tsun*, Shang or early Chou period (China), Bronze, H. 28 cm, private collection, Holland.



Pl. 13, No. 16, *Chih*, Shang period (China), Bronze, H. 15 cm, S. H. Minkenhof coll.

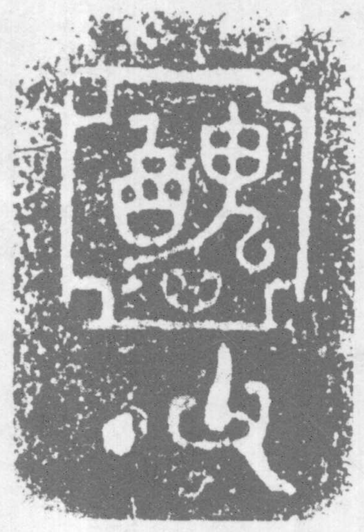




Pl. 14, No. 18, *Yu*, Shang period (China), Bronze, H. 34,5 cm, W. van der Mandele coll., Bloemendaal, Holland.







Pl. 15, No. 19, *Square Ting*, Early Chou period (China), Bronze, H. 22,5 cm, Stoclet coll., Brussels.



Fig. 294



Fig. 295



Fig. 296



Fig. 297

together forming a kind of corolla. Fig. 294. For the detailed décor, consisting of t'ao-t'ieh masks, birds and snake-like kuei, see Fig. 295—297. The lower sunken horizontal band is pierced by a cruciform hole.

The patination is varied, showing grey, green and red patches. On the inside of the foot is a character in the form of a human figure.

See M. René Grousset: *L'évolution des Bronzes Chinois Archaïques*, Paris 1937.

No. 1590.

PLATE 102

1. Open bronze vessel on a circular foot of medium height.

Height: 162 mm. Height of foot: 40 mm. Diam. of mouth: 232 mm. Diam. of foot: 153 mm. Scale: 46 %. Weight: 2.9 kg.

Epoch: Yin.



Fig. 298

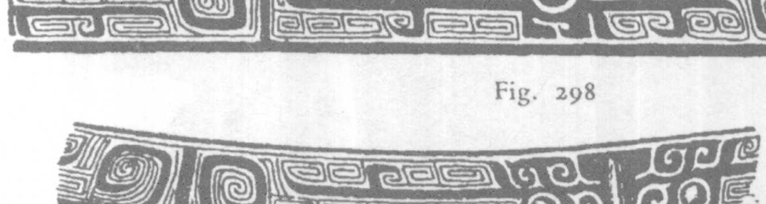


Fig. 299 a



Fig. 299 b

The body is decorated in two zones, the upper one narrow, interrupted by three t'ao-t'ieh heads, and the lower one broader and decorated with a network of lozenges and meander patterns, as well as tall, conical knobs. The upper zone has a dissolved dragon décor (Fig. 298). The t'ao-t'ieh heads

SELECTED CHINESE ANTIQUITIES

FROM THE COLLECTION OF

GUSTAF ADOLF

CROWN PRINCE OF SWEDEN

EDITED BY

NILS PALMGREN

STOCKHOLM 1948

GENERALSTABENS LITOGRAFISKA ANSTALTS FÖRLAG

are somewhat tiger-like and have a lozenge-shaped pattern on the forehead. On the circular foot is a dissolved dragon décor, Fig. 299. The top of the circular foot is pierced by three rectangular holes. The patination varies in colour between greenish-grey and black. In the centre of the inside there are sunken characters. According to B. KARLGREN (Fig. 299 b) »the upper character is hiang, 'sacrificial feast'. The lower is a symbol which frequently occurs denoting a receptacle, a box (e. g. for keeping a dagger axe), and should probably be read *chu* = to store, a store». The same sacrificial scene is to be observed on a bronze ceremonial vessel in Freer Gallery of Art, Washington — See *Oriental Art in America*, Chicago 1937, Pl. 7 and »Contents».
No. 1601.



Fig. 300

2. Ceremonial bronze axe.

Length: 223 mm. The blade's max. breadth: 150 mm. Scale: 55 %. Weight: 980 gr.
Epoch: Yin.

The blade is broad and curved. On it is a curling kuei dragon with large fangs protruding from its open jaws, partly executed in openwork, Fig. 300. The part of the axe intended for hafting is pierced by a circular hole, and at the square end are two sunken kuei with a character between them, Fig. 301, originally no doubt inlaid. Heavily corroded bronze with patches of green, blue and red.

See P. ACKERMAN (in Iranian Institute, New York): *Ritual Bronzes of Ancient China*, Pl. 63.
No. 1591.

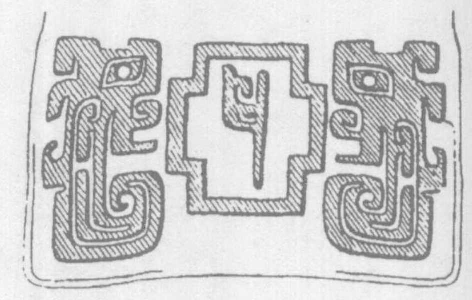


Fig. 301

PLATE 103

Ting, a bronze cooking-vessel; tripod with solid legs, and two vertical handles attached to the rim.

Height: 189 mm; with the handles, 224 mm. Scale: 71.5 %. Weight: 2,270 gr.
Epoch: Yin.
Probably from An Yang, Honan.
Technique: cire perdue.



Fig. 302

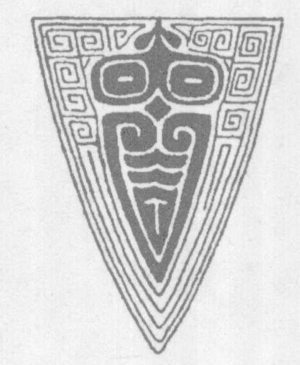


Fig. 303 a

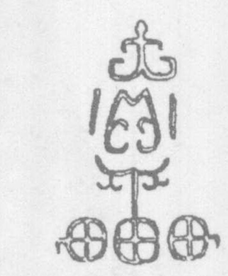


Fig. 303 b

The legs are simple and straight, circular in section and somewhat tapering towards the lower end. The rim slightly curving outwards. The handles square or rectangular in section. The upper part of the body decorated with a broad horizontal band, divided by raised ridges into six sections, each containing a kuei in relief against a lower background of meander-spirals, Fig. 302. Below this horizontal band there are triangular surfaces, acutely pointed downwards, containing cicadas in relief, against a similar background, Fig. 303 a. On the inside of the vessel, near the rim, is an inscription, Fig. 303 b. The entire ornamentation inlaid with a black material. Green malachite patina.

According to B. KARLGREN »the lower character is Ch'ê 'chariot'; as a personal name. The upper character is unknown (it contains, at the bottom, the element 'cowrie')».
No. 1594.

PLATE 104

Bronze axe having a cylindrical tube for hafting.

Length: 200 mm. Scale: 100 %. Weight: 592 gr.
Epoch: Yin.

Its edge is curved and oblique. On the part surrounding the tube there is, on either side, a rich décor consisting of large kuei dragons seen from above and each having two horns, a lozenge in the centre of the forehead and a curling tail, Fig. 304. On either side of the butt-end of the axe are t'ao-t'ieh masks, Fig. 305, which evidently once were inlaid. Greyish-green water patina.
No. 1603.



Fig. 305



Fig. 304

PLATE 105

1. Bronze dagger-axe, Ko.

Length: 305 mm. Scale: 52 %. Weight: 169 gr. Spec. grav.: 6,3.
Epoch: Huai.

Shape slender and graceful. The Ko is decorated only on the base of the blade towards the top, Fig. 306.

Reported to be from Shou-chou (KARLBECK).
No. 1565.



Fig. 306

2. Bronze dagger-axe, Ko.

Length: 245 mm. Scale: 65 %. Weight: 200 gr.
Epoch: Huai.

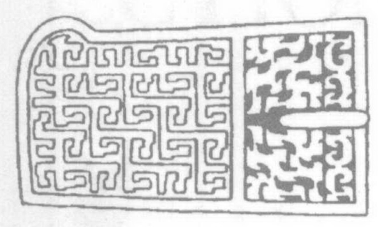


Fig. 307

Shape slender and graceful. Decorated on the »head» and on the base of the blade towards the top. The »head» is partly executed in openwork, Fig. 307, and parts are inlaid with turquoise.
No. 1602.

PLATE 106

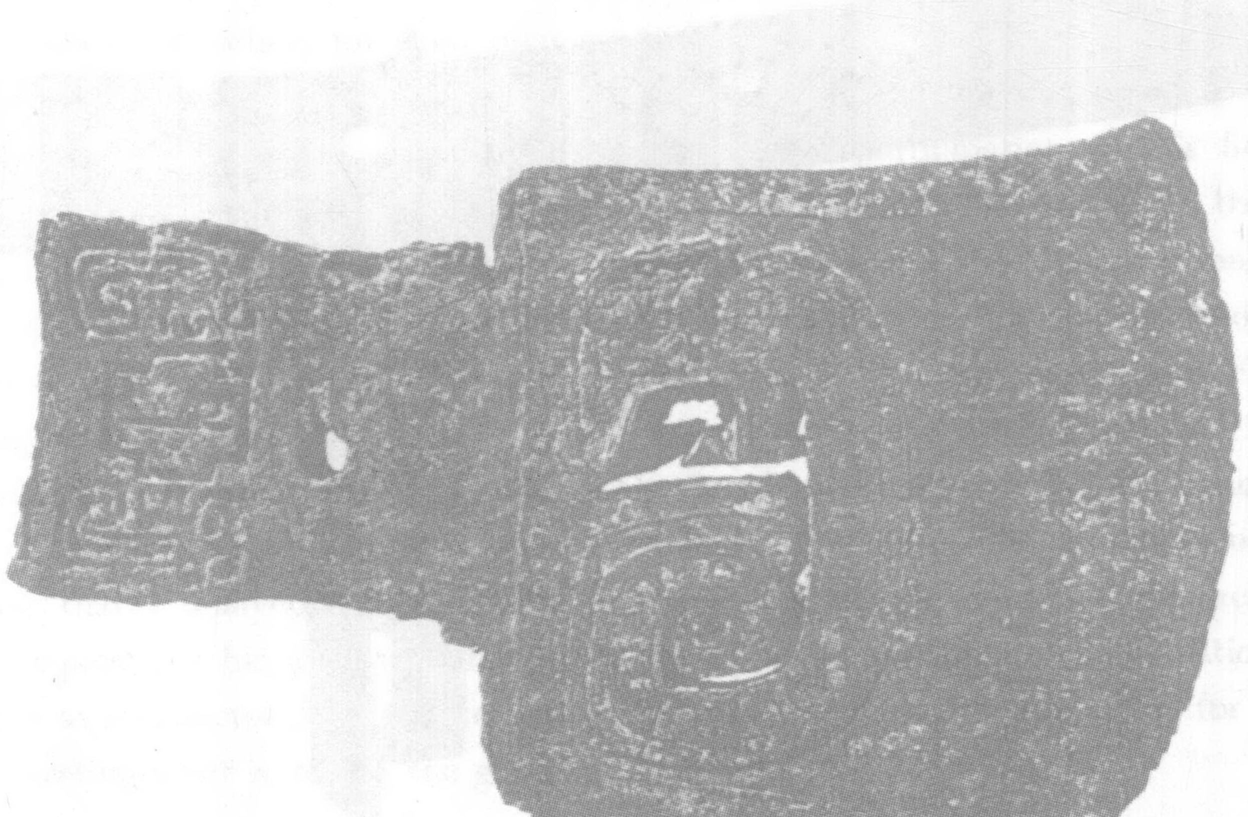
Bowl-shaped bronze lid on a low circular foot.

Diam.: 209 mm. Height: 70 mm. Scale: 50 %. Weight: 1,034 gr.
Epoch: Middle Chou.

It is decorated on the outside with double rows of scales. The inside has a long inscription, the same as that in MFEA, Bulletin No 8, Stockholm 1936 p. 48, B. 137. It reads: »In the 12th year, 3rd month 2nd quarter, on the day Ling-hai, the King was in the xx temple; the King called Wu shi to summon Ta . . . . . » It goes on to say that the King gave Ta a village, which formerly belonged to another, Lord X-K'uei. He ordered the Court Officer Cho to inform X-K'uei thereof. K'uei willingly agreed and presented the officer with a chang jade and a roll of silk. Cho then betook



1



2

Pl. 102

himself to Ta and handed over the village, receiving in his turn from Ta two horses and a chang jade. Ta further gave X-K'uei a chang jade and a roll of silk. Extolling the goodness of the King, Ta had the vessel cast in honour of his dead father X-po.
No. 1592.

PLATE 107

1. Bronze mounting in the shape of a t'ao-t'ieh mask, having a ring suspended from its snout.

Breadth: 74 mm. Height without ring: 50 mm., with ring: 100 mm. External diam. of ring: 70 mm. Scale: 80 %. Weight: 295 gr.
Epoch: Huai.

It is fixed to an irregular, quadrilateral piece, probably of lead. The mounting has evidently been let into a wooden object (coffin or chest?), as imprints of wood and woven material as well as fragments of lacquer are still attached to it. This object exhibits the very highest standard of execution and design in the Huai style, the relief showing wide variations as to depth. There are graceful volutes and minutely executed details, Fig. 308. The half-tube holding the ring is ornamented in three parallel strips, the centre one being at a lower level as compared to the others.

The ring is plain. Pale greyish-green patina.
No. 1608.

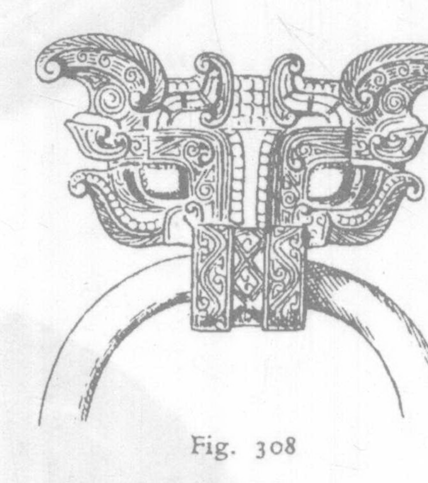


Fig. 308

2. Bronze mounting in the shape of a t'ao-t'ieh mask, having a ring suspended from its snout.

Breadth: 57 mm. Height: 54 mm. External diam. of the ring: 65 mm.
Scale: 79 %. Weight 111 gr.
Epoch: Huai.
Details of the mask, see Fig. 309.
The ring is plain.
Pale green-grey patina.
No. 1403.

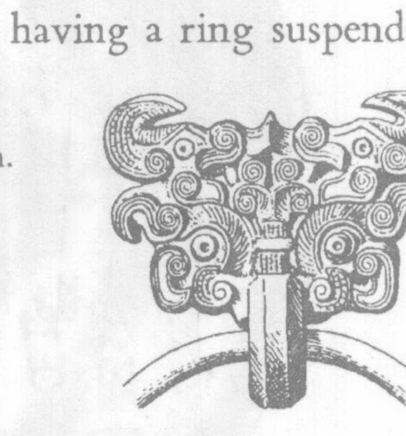


Fig. 309

3—4. A pair of axle-caps of bronze.

Height: 76 mm. Diam. of the flat part: 80 mm. Length of linchpin: 80 mm. Weight without pin: 405 gr. Weight of the pin: 131 gr.
Epoch: Huai.

They consist of a plain, flat, circular part, a »neck» with a ring in fairly high relief, and above that an upper part, ten-sided in section and having a flat top. The linchpin shows a t'ao-t'ieh head in fairly high relief, Fig. 310, and is run through two opposite openings in the »neck». The pin-head is



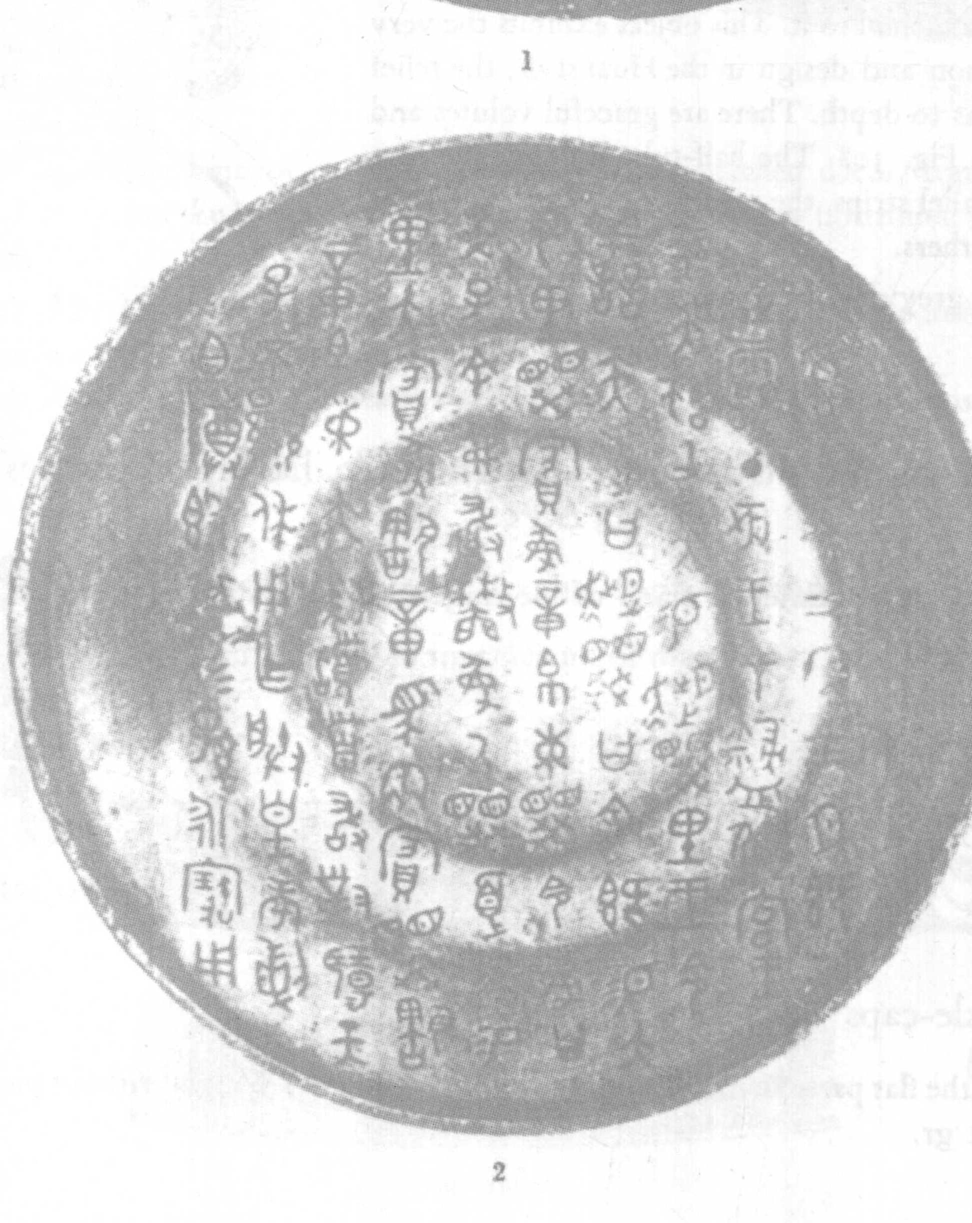
Pl. 104



Pl. 103

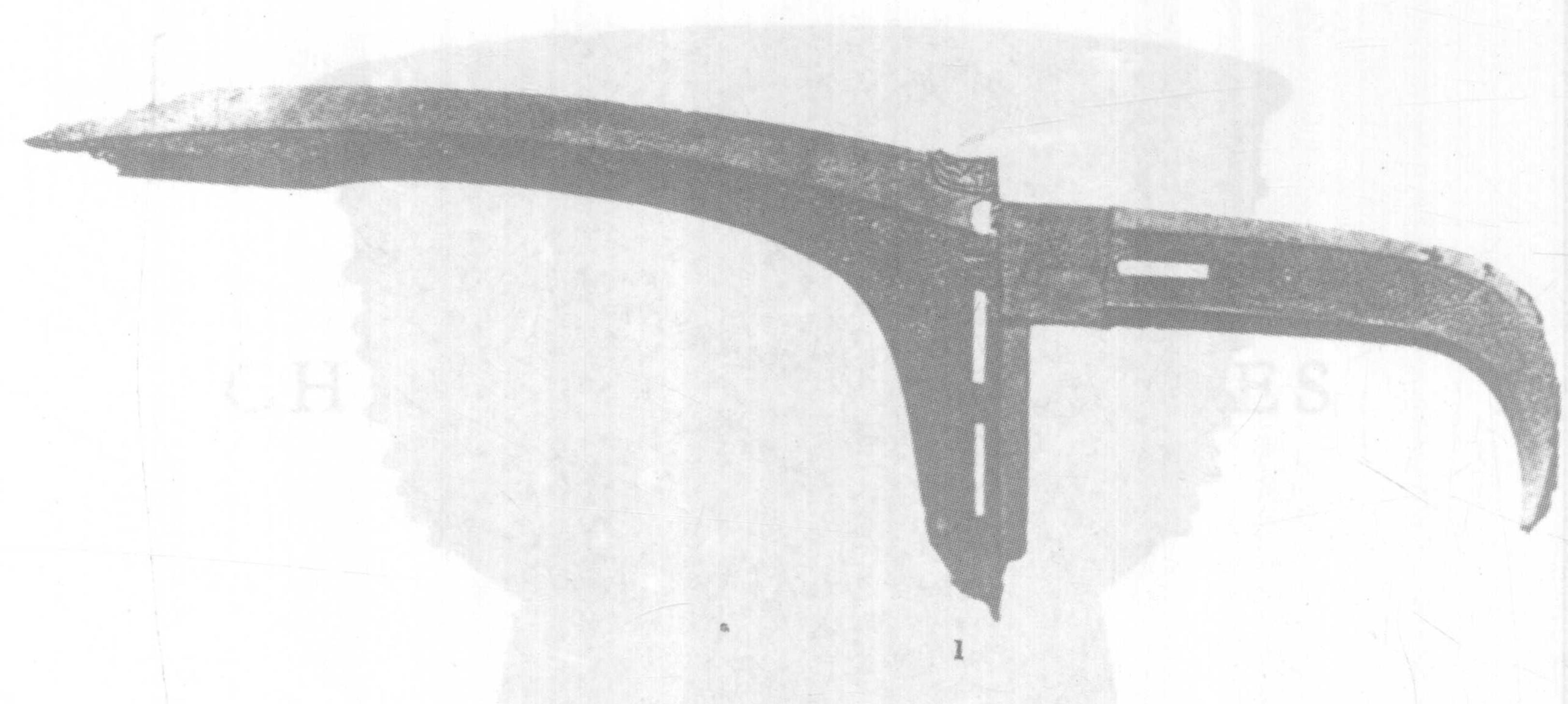


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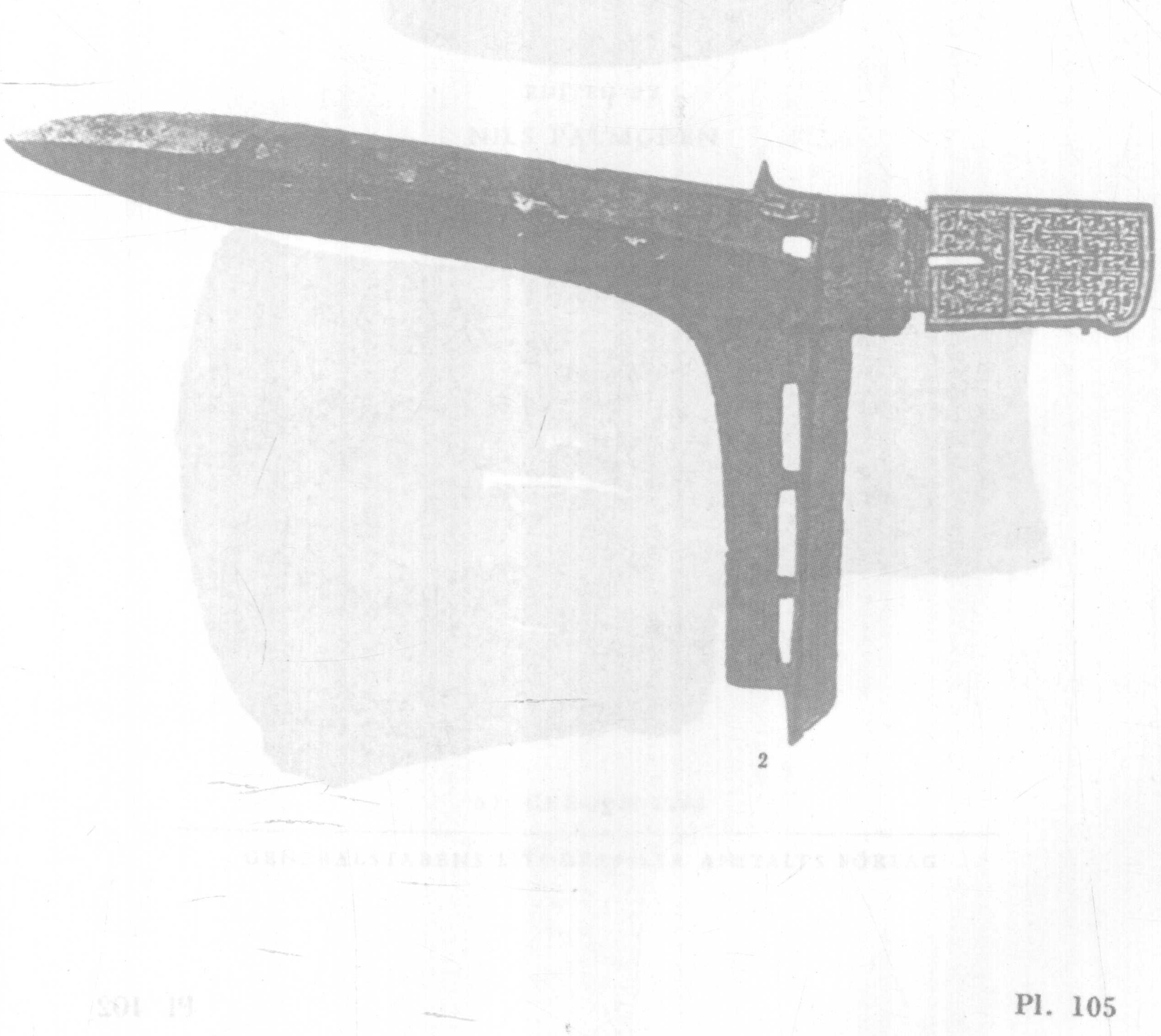


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Pl. 106



1



2

Pl. 105

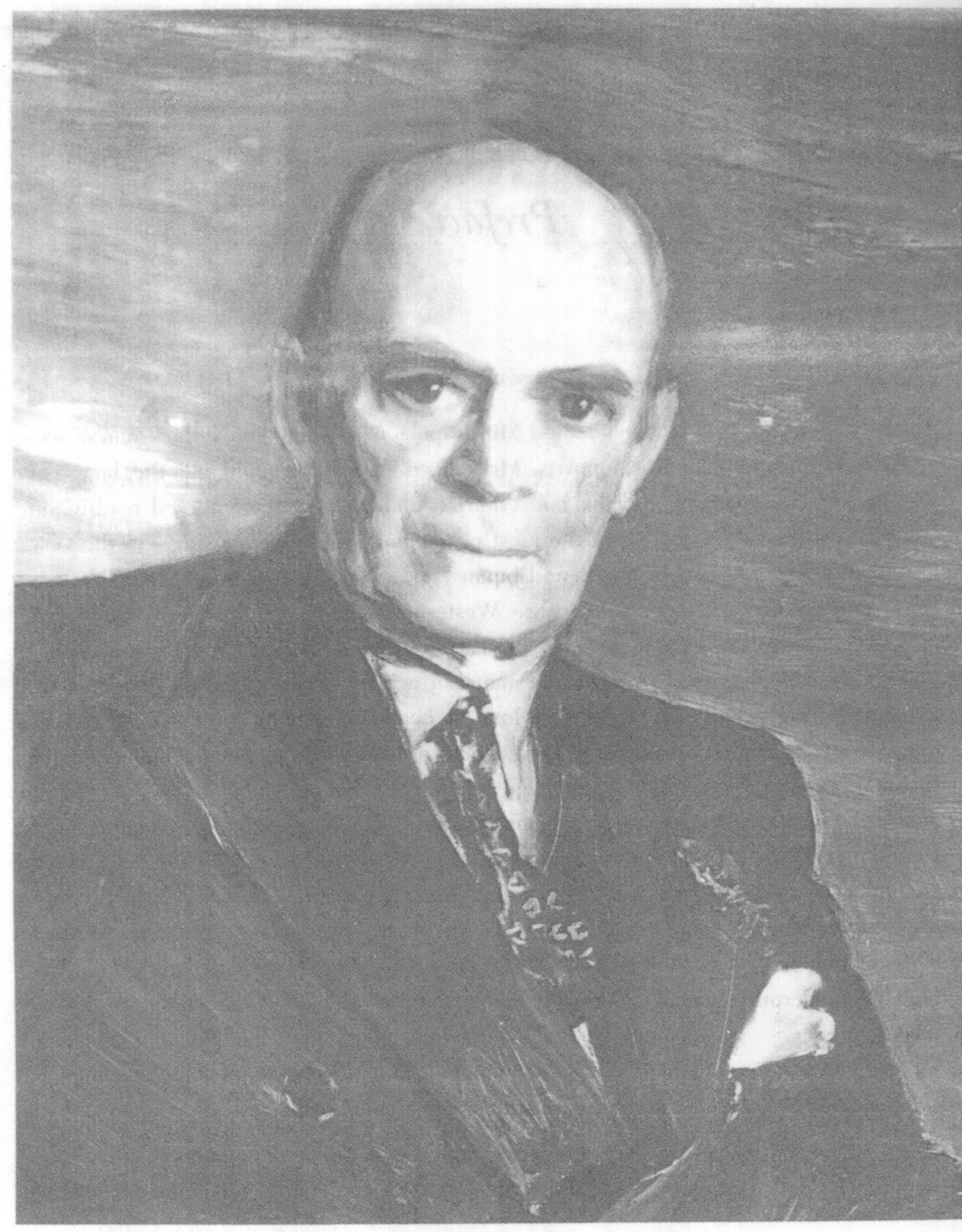
A CATALOGUE *of the* CHINESE BRONZES *in the* ALFRED F. PILLSBURY COLLECTION

by

Bernhard Karlgren

DIRECTOR OF THE EAST ASIATIC COLLECTIONS, THE MUSEUM OF FAR EASTERN ANTIQUITIES

PUBLISHED FOR THE MINNEAPOLIS INSTITUTE OF ARTS BY THE UNIVERSITY OF MINNESOTA PRESS, MINNEAPOLIS



Alfred F. Pillsbury

Foreword

The publication of this catalogue of my collection of Chinese bronzes coincides with the closing of my career as a collector. Assembling the collection has provided an absorbing interest for over twenty years and has given me great happiness. The personal satisfaction of owning these beautiful relics of a great civilization has been increased by the pleasure and privilege of sharing them with others and of making new friends through them. The sympathy and understanding between those who have chosen Chinese art above all others for their own is unique. I am glad to have been a member of that group.

It is with regret that I face the end of my active participation in this field. The increasing difficulty of acquiring fine pieces makes it inevitable. As it stands, the collection is, I think, worthy of the great tradition that produced the Chinese bronze art. I should like to pay tribute to C. T. Loo for his part in perpetuating that tradition in this country and for the interest and cooperation which have contributed so much to the building up of my collection.

I want also to express my gratitude to Dr. Bernhard Karlgren, who has done me the honor of writing this catalogue. It was in the hope of securing his consent to undertake this task that I delayed my decision to have the catalogue published. His acceptance of my request for his assistance has made it easier to contemplate the cessation of my activities as a collector. There is no one whom I believe to be so well fitted for the task of interpreting what is, to me, the greatest of all arts.

A. F. PILLSBURY

Minneapolis, 1950

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Preface

In the summer of 1948, when I visited Minneapolis in order to study the Chinese section of the Minneapolis Institute of Arts, Mr. Alfred F. Pillsbury did me the honor of asking me to write a catalogue of his collection of Chinese bronzes. I agreed readily, on the one hand because this is one of the most prominent collections existing – in the very front rank of collections outside China and Japan (no approximate idea of the collections in these two countries is possible because Westerners seldom can obtain photographs from them and only a few catalogues have been published so far); on the other hand because it is an exemplary case of what one man can achieve when guided, through many years of collecting activity, by an intense love of beauty combined with a keen critical acumen. It was thus a real pleasure to be allowed to work with the description of this remarkable collection.

I could stay in Minneapolis only a comparatively short time, but the Director of the Institute, Mr. Russell A. Plimpton, and Mrs. Edward H. Sirich did all in their power to facilitate my studies, and I wish to express my deep gratitude to them both. In completing this catalogue, I have had to work with photographs and notes taken *in loco*, and Mrs. Sirich has by correspondence given me every help. I wish to emphasize that without her generously given and highly competent aid, I could not have accomplished my task.

BERNHARD KARLGREN

Stockholm, 1949

Acknowledgment

Quietly and unobtrusively Chinese bronzes have taken their place among the great works of art of the world. Long known and admired in Asia, it is only during the last thirty years that they have become equally known and admired in the West. This knowledge is due largely to the small group of private collectors who were the first, aside from a few museums, to understand, acquire, and make them available to an increasingly appreciative public.

Among these pioneer collectors was Alfred F. Pillsbury, who bequeathed the present great collection of Chinese bronzes, together with his other collections, to the Minneapolis Institute of Arts in 1950. The Institute is deeply indebted to Mr. Pillsbury for all his gifts, but particularly for this collection, whose growth it has watched from its beginning in 1930. His desire to share his own delight in Chinese bronzes with others prompted the continuous exhibition at the museum of the collection, the distinction and importance of which increased with every passing year. He built it lovingly, one carefully chosen piece at a time, and invariably sought the advice of Marjorie W. Sirich, whose opinion he rightly held in high esteem.

As the collection neared completion, Mr. Pillsbury realized that a catalogue would offer further material for study to lovers of Chinese bronzes everywhere. The present book, made possible through a special fund which he provided for its publication, is the result. If it brings to others a fraction of the pleasure the bronzes themselves brought to Mr. Pillsbury, it will have served its purpose well.

Special thanks are due to Mrs. Sirich for her invaluable help in the preparation of this catalogue, to the University of Minnesota Press for its splendid cooperation throughout, and to the many others who contributed to the publication of this book. The portrait of Mr. Pillsbury was painted by Frances Cranmer Greenman.

RUSSELL A. PLIMPTON

Senoku = K. Hamada, *Senoku Seishō; or, The Collection of Old Bronzes of Baron Sumitomo*, 1st ed., 1919

Sun, *Cheng ts'iu* = Sun Chuang, *Cheng ts'iu kuan ki kin t'u*, 1931

Umehara, *Etude* = S. Umehara, *Etude des bronzes des royaumes combattants*, 1936

Umehara, *Rakuyō* = S. Umehara, *Rakuyō kinson kobo shūei*, 1937

Umehara, *Seikwa* = S. Umehara, *Shina kodō seikwa*, 7 vols., 1933–1935

Waterbury = Florance Waterbury, *Early Chinese Symbols and Literature: Vestiges and Speculations*, New York, 1942

NOTE. Unless otherwise indicated, all measurements of the height of the vessel are with the handle.

Abbreviations of Book Titles Quoted in the Catalogue

BMFEA = *Bulletin of the Museum of Far Eastern Antiquities*, Stockholm

Bull. Minn. = *Bulletin of the Minneapolis Institute of Arts*

Ch'en, Style = Ch'en Meng-chia, "Style of Chinese Bronzes," *Archives of the Chinese Art Society of America*, Vol. 1, 1945

Chicago Cat. = C. F. Kelley and Ch'en Meng-chia, *Chinese Bronzes from the Buckingham Collection*, The Art Institute of Chicago, 1946

Comstock = Helen Comstock, "Chinese Bronzes in the Pillsbury Collection," *The Connoisseur*, September 1943

Davidson = J. Leroy Davidson, *An Exhibition of Chinese Bronzes*, C. T. Loo, New York, 1939

Eumorfopoulos Cat. = W. Perceval Yetts, *The George Eumorfopoulos Collection of Chinese and Corean Bronzes . . .*, London, 1929–1930

Freer Cat. = J. E. Lodge, A. G. Wenley, and John A. Pope, *A Descriptive and Illustrative Catalogue of Chinese Bronzes Acquired during the Administration of John Ellerton Lodge*, Washington, 1946

Jung, *Shang Chou* = Jung Keng, *Shang Chou yi k'i*, 1941

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Huang, *Tsun ku chai* = Huang Sün (Chün), *Tsun ku chai so kien ki kin t'u*, 1936

Huang, *Ye chung* = Huang Sün, *Ye chung p'ien yü*, Vol. 1, 1935; Vol. 2, 1937; Vol. 3, 1942

Karlgren, New Studies = B. Karlgren, "New Studies on Chinese Bronzes," *Bulletin of the Museum of Far Eastern Antiquities*, Vol. 9, 1936

Liu, *K'i ku shi* = Liu Sin-yüan, *K'i ku shi ki kin wen shu*, 1902

Lo, *San tai* = Lo Chen-yü, *San tai ki kin wen ts'un*, 1937

Menzies = J. Menzies, *An Exhibition of Ancient Chinese Bronzes, Loaned by C. T. Loo and Company*, New York, 1940

List of Plates

A Catalogue of the Chinese Bronzes in the Alfred F. Pillsbury Collection

Preliminary Remarks on Chronology

THE earliest historical Chinese dynasty reigned, according to the orthodox chronology, 1766–1122 B.C., its latter half (from P'an Keng, who moved to the present An-yang) beginning in 1401 B.C. This scheme should be corrected into: *circa* 1525–1028 B.C. for the whole dynasty, and 1300–1028 for its latter half (see BMFEA, Vol. 17 (1945), pp. 114–121). These dates are now championed by many recent authors, e.g., L. C. Goodrich and Ch'en Meng-chia, and lately have been confirmed with astronomical proofs by H. H. Dubs (T'oung Pao, 1950, pp. 332–335).

This dynasty is called Shang or Yin. The terms are practically synonymous, since each of them was used both as a name for the capital and as a name for the Royal house. In Chinese usage in later times, now one, now the other name has been employed. In archaeological catalogues such as *Po ku t'u lu* and *Si Ts'ing ku kien*, the dynasty has been termed Shang, and this example has been followed in modern times, for instance, by Jung Keng and by practically all American writers on Chinese art. On the other hand, the great archaeologist Lo Chen-yü used the term Yin in his famous writings on the documents from that dynasty. In 1917 he published his *Yin wen ts'un*, "Inscriptions from the Yin dynasty," and he invariably called the oracle-bone documents "Yin script." He always spoke of the capital as *Yin k'ü* (in Wade's transcription, *Yin ch'ü*), "the ruins of Yin," never as *Shang k'ü*.

The term *Yin k'ü* goes back to *Tso chuan*, Ting, 4th year.* It is indeed impossible to know from directly contemporaneous sources whether the Royal house of that dynasty called itself Shang or Yin. That their capital was called *ta yi Shang*, "the great city Shang," in the oracle bones proves nothing, of course, about the name of the family. If we go to the two oldest texts existing, those of Early Chou time, the *Shï king* and the (authentic chapters of) *Shu king*, we find that the names Shang and Yin, whether used for the city, the state, or the ruling house (it is often impossible to distinguish these; e.g., in the phrase *fa Shang*, "to attack Shang"), occur in the following way: in the *Shï king*, Shang is

* Western authors persist in reading this phrase *Yin hü* (*hsü*), which is erroneous. In a gloss on *Tso*, Ting 4, the authoritative guide to the reading of difficult words in the classics, Lu Tê-ming (*King tien shï wen*, early T'ang time), definitely states that in the sense of "ruin" the character "empty" should be read *k'ü* (*ch'ü*), not *hü* (*hsü*). In the *Odes* (Ode 50) we likewise have the character "empty" meaning "waste" and read *k'ü* (*ch'ü*) (*King tien shï wen*), not *hü* (*hsü*). *Ts'ie yün* confirms this. Another confirmation is to be found in *Li ki*, T'an kung.

used in 13 cases in 6 odes, Yin in 11 cases in 6 odes, and Yin-Shang in 4 cases in 2 odes; in the *Shu king*, Shang is used in 16 cases in 9 chapters, and Yin in 66 cases in 15 chapters. Thus, whereas the two names are practically equally frequent in the *Odes*, the name Yin is infinitely more common in *Shu king*, a fact which is important and significant since it shows that in Early Chou time the preceding dynasty was better known under the name of Yin than of Shang.

To this we may add a weighty testimony. Confucius claimed to be a descendant of the reigning house (Tsï) of Sung, whose members again were the direct descendants of the Yin-Shang family. Confucius thus considered the kings of that dynasty to be his ancestors, and we may take it for certain that the tradition in that noble family, with all its ancestral cult performances, was very clear and definite on such a fundamental point as the original name of the family at the time when it ruled the world. Now Confucius, in *Lun yü*, frequently speaks of the Yin dynasty, but never of the Shang. This testimony is decisive, and we shall use the name Yin here since it is clearly better supported than Shang in the oldest sources obtainable.

As a chronological frame for the dating of Chinese bronzes, Ch'en Meng-chia has proposed a scheme (Chicago Cat., p. 143) which calls for some remarks. In regard to Yin and Early (Western) Chou, Ch'en and myself are in perfect accord. But for the rest I have some objections. Ch'en's scheme is as follows:

- A. Yin (latter half), 1300–1028
- B. Western Chou, 1027–771
  1. Early Western Chou (kings Wu, Ch'eng, K'ang, Chao, half Mu)
  2. Middle Western Chou
  3. Late Western Chou
- C. Eastern Chou
  1. Ch'un ts'iu period, 770–481
  2. Warring States (Chan kuo) period, 480–222

This scheme contains two serious misnomers and one debatable point. (1) The Ch'un ts'iu period (Lu annals) in reality comprises the years 722–481; Ch'en has prefixed to this the years 770–723, which do not at all belong to the historical Ch'un ts'iu period. (2) The Warring States period, ending in 222, is not a subdivision of Eastern Chou. Eastern Chou ended in 256 by the fall of the last Chou king. Ch'en has included the years 255–222 in Eastern Chou, which is a direct misnomer. (3) The student who looks up the phrase *Chan kuo*, "Warring States," in the authoritative dictionaries *Ts'ï yüan* and *Ts'ï hai* will find that the period in question is counted from 403–222 (403 being the year when the states Chao, Wei, and Han were recognized by the king). The year 403 was always considered a great turning point and hence was the starting point for Sï-ma Kuang in his great history of China. It is true that some authors count the Warring States as from Cheng-ting Wang of Chou, i.e., from 468 (certainly not from 481, with Ch'en). But the Chou-time work *Chan kuo ts'è*, "*Counsels of the Warring States*," does not go further

back than to An-wang of Chou (401-376 B.C.), a fact which confirms the traditional dating 403-222. Since this is so, it is an unpractical and unfortunate confusion that Ch'en introduces a period "Warring States, 480-222."

The greatest disadvantage of Ch'en's scheme, however, is not that it deviates from the correct and traditional purport of the terms employed. The inconvenience lies on another plane. His historical divisions – 1027-771, 770-481, 480-222 – do not correspond to the style periods in the bronze art. The reason for this is easily realized. The Ch'un ts'iu period (*recte*, 722-481) is not a natural historical era; it is a mere incident that the writer started the chronicle with 722 B.C. and ended it with 481. Neither 722 (or, with Ch'en, 770) nor 481 is a milestone in the historical events (the removal of the capital in 770 marked no new departure in the evolution). The style periods are quite different: Early Chou style, 1027-*circa* 900; Middle Chou style, *circa* 900-*circa* 600; Huai style, *circa* 600-*circa* 222. If we try to find the real epochs in the historical evolution corresponding to these shiftings in art style, they are easily detected. The period of Early Chou, 1027-900, was the Chou foundation and consolidation era. Then, from the conquests of Chao and Mu, the Chou realm took on another political physiognomy: it became a much larger confederation of powerful feudal states, and the years 900-600 (the year 771 was an episode without significance in this respect) were the long Middle Chou era, in which first a powerful Royal house and then the equally powerful feudal lords, quite particularly the *Wu pa*, "five hegemons," kept the feudal system strong and flourishing. The last of the five hegemons (Chuang of Ch'u) died in 591. And this was precisely the time when the Middle Chou style had played out its role; it reigned roughly 900-600 B.C. The following epoch, *circa* 600-222, was the decadent feudal era – decadent, not in culture generally (on the contrary this was the time of the greatest literary and philosophical activity), but in regard to the political system. To this political era of disintegration corresponds closely the reign of the Huai style in art. There is thus a striking correspondence between historical evolution and art-style evolution, a correspondence which is entirely obscured by the historical denomination system propounded by Ch'en (1027-771, 770-481, 480-222). We shall have to use other terms.

For the Chou foundation period we can very well use the short term "Early Chou."

For the strong feudal period (first a strong Royal house with loyal great feudatories), then a weakened Royal house and dominating feudal states (five hegemons), we can with advantage employ the term "Middle Chou."

For the third period, that of the decadent feudal era – first the Chou centuries 600-256 and then interregnum 255-222 – it is difficult to find a short historical denomination. The components (latter half of Chou plus interregnum) cannot be reduced to a short and handy formula. It is easily seen that "Warring States" will not do, because the Warring States began, at the earliest in 468, but better, in 403, and the era of decadent feudalism began much earlier, *circa* 600. Nor can the period 600-222 be called "Late Chou" (a frequently recurring term) since the years 255-222 were not "Chou" at all. In fact, we know through inscriptions that many important vessels in the art style so unhappily named

"Late Chou" in many catalogues were created precisely during the last decades of the Ch'u realm in Shou-chou, i.e., at a time when the Chou had ceased to exist. We should constantly run the risk of placing a specimen a quarter-century too early if we defined everything in this style as "Late Chou." Moreover, "Late Chou" suggests the very last centuries of the dynasty, and for the earlier part of the decadent era (sixth century), *late* Chou is an inadequate term. In these circumstances it is better to borrow the name of the art style, "Huai" (so called after the first localized finds; cf. Hallstatt and La Tène) for denominating the political era as well, and to call the years 600-222 (the era of decadent feudalism) the "Huai style period."

If we are able to subdivide these long periods and attribute some vessels to a particular part of one of them, we should not use the terms "early," "middle," and "late" but, to avoid confusion, say, for instance, "beginning Middle Chou," "high-tide Middle Chou," and "declining Middle Chou."

A few words should be added about the assertion that the Huai style started as early as *circa* 600 B.C. Even if we leave aside the much debated Piao bells, there is still the testimony of the Fu Ch'ai Kien vessel (Berlin) dating from Fu Ch'ai's time (495-473), in a very advanced and ripe Huai style. There is the Yün Er bell (*T'ao chai ki kin sü lu* 5) in richly developed Huai style, which cannot be later than the sixth century because its producer was the son of the king of Sü, a state extinguished in 512. There is the pair of Hu, in elaborate Huai style, datable *circa* 482 B.C., fully discussed by Yetts (Cull Catalogue, pp. 45 ff.). There are the Chï Po bowl in the present collection and its mate in the Freer collection, which must be anterior to 453, as is well shown by Lodge (Freer Catalogue, p. 57). The richness and variation in the Huai style décor offered by these pieces make it imperative to place the beginning of the Huai style at least a century earlier, not later than 600 B.C.

Chronological Chart

Yin	*circa* 1525-1028 B.C.
Latter half	1300-1028 B.C.
Early Chou	*circa* 1027-900 B.C.
Middle Chou	*circa* 900-*circa* 600 B.C.
Huai style period	*circa* 600-*circa* 222 B.C.
Chou centuries	600-256 B.C.
Interregnum	255-222 B.C.
Ch'in	221-206 B.C.
Han	206 B.C.-A.D. 220

Description of the Bronzes

NUMBER 1. *Square Ting*, RECTANGULAR, PLATE 1

That vessels of this type should be defined as Ting is confirmed by inscriptions. The principal surface and the upper belt, homogeneous in style and décor technique, are set off against each other only through a narrow undecorated interstice. This interruption obtains likewise in the flanges, which are the same on surface and upper belt, eight flanges dividing the vessel into eight panels. The ground is squared spirals all through. On the principal surface there is a bodied *t'ao-t'ie* (monster), the antithetical bodies drawn out so long as to make it more or less a "dragonized *t'ao-t'ie*." The mouth line is drawn so wide apart that its in-curving, C-shaped hooks almost give the impression (false) of being the front legs of the dragon. This monster is in a rounded relief, with but few emphasizing incised lines; it has a hooked forehead shield, big, standing, C-shaped horns, and a raised tail cleaving midway in one short upward hook with a longer one curving down at the end. The leg, with a tuft at the point where it goes out from the body, has a turned-up claw. In the upper belt the antithetical beaked dragons have the same rounded relief; they have tiny crests and big, C-shaped horns. They have only one leg, stretching forward, the two downward hooks being merely tufts. The central flange forms the ridge in a rudimentary *t'ao-t'ie* mask (nose and hooked forehead shield) (cf. vessel 14 below). On the upper part of the cylindrical legs there are flanges and *t'ao-t'ie* masks, here with round-topped forehead shield (in contrast to the hooked shield on the principal surface). On the outside of the handles there are incised spiral lines.

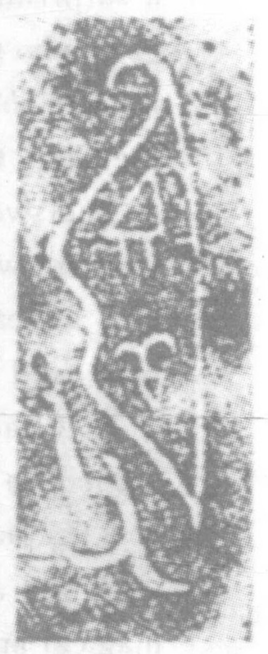
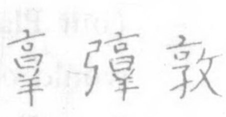


figure 1

This vessel was already recorded, with a rubbing of the inscription, in *Kün ku lu kin wen* (1896), I.3, 8, and further, with an illustration of the vessel, in Sun, *Cheng ts'iu* (1931), p. 1, the vessel then belonging to Ch'en Ch'eng-k'iu of Min-hien. Wang Kuo-wei has (*ibid.*) discussed the inscription (our figure 1). This obviously consists of a *kung*, "bow," inside of which is the drawing of a building and *yang*, "sheep." Below the bow are the characters *fu Ting*, "[to] Father Ting." The building is surely a temple hall or shrine, and Wang is undoubtedly right in identifying it with the *hiang* (figure 2A), "to offer in sacrifice," of the Chou script. But then arises the question whether to read *hiang* and *yang* together as one character or not. Wang does: figure 2B. This character, read *ch'un*, is in Shuowen defined as "well cooked, fully prepared" (i.e., sacrificial dish), but there are no texts in support of this. We know the character from several Chou inscriptions, but then as loan character for other compound graphs. Wang would take the whole as a phonetic and *kung*, "bow," as radical, constructing an otherwise undocumented character, figure 2C, which would be the original graph for the *tuei* (figure 2D) in the phrase *tuei kung ki kien*, "the carved (decorated) bows are strong," in Ode 246. Thus the whole upper part of our inscription would mean "(carved =) decorated."



A B C D

figure 2

This is all very strained and farfetched. In the collection of Wang Yi-jung of Fu shan there was a Ting with a very similar inscription (first recorded in *K'ia chai tsi ku lu*, III.6), but there the "house" is outside and the "sheep" are inside the bow, which is sufficient proof that they are two graphs, not one, and that the "bow" is certainly not a

radical with the rest as phonetic. As often, in Yin time, the inscription is more a rebus than a text. How we are to make out the meaning of the indubitable elements – "bow," (temple hall) "to offer in sacrifice," and "sheep" – is, of course, a matter of conjecture. The idea of the bow may be that the meat offered in the shrine was obtained in a hunt. "Sheep" need not mean domestic sheep; it could also be *shan yang*, "mountain goat."

A few words should be added here in connection with the animal figures on this bronze. Miss Florance Waterbury (in her book *Early Chinese Symbols and Literature: Vestiges and Speculations*, New York, 1942) has made an exceedingly careful and painstaking examination of the animal décor elements on early bronzes. She tries to determine which are the real animals that the artists had in view. She arrives at a very definite fauna, and since she starts from the axiom that real animals are intended, she comes to the conclusion that fanciful animals simply do not exist in the décor. Thus, for instance, she paradoxically denies the existence of the dragon in the bronze décor, admitting at most that the type "vertical dragon" (e.g., vessel 32) could be called *K'uei lung*, "K'uei dragon," but adding that there again it is the picture of an alligator and no fanciful animal. As a consequence of her conclusions in this vein, she excludes the term *t'ao-t'ie*, "monster." What is generally called *t'ao-t'ie* is either the picture of a tiger, a water buffalo, a bull, or a ram.

But in order to motivate this, she has to force the material unduly. The principal type of the *t'ao-t'ie* is, she thinks, a tiger. Why we should preferably find a likeness with the tiger is difficult to understand, since the *t'ao-t'ie* invariably has horns; indeed Miss Waterbury makes the horns the decisive criterion, whether a *t'ao-t'ie* is a buffalo, a bull, a ram, or – a tiger! The tiger is characterized quite particularly by the recumbent C-shaped horns, e.g., in our Plate 15. I confess that just because of these horns the tiger is the very last animal that would come to my mind. Miss Waterbury on the one hand declares two *t'ao-t'ie*, which have every essential feature and detail identical except the horns, to be two different animals. The animal's head on the lower part of our Hien (Plate 11) she defines as a "buffalo head" (her Plate 30) because of the straight horns; the same face (same ear, same eyebrow, same spiral at the chin and curving-out mouth line, same nose, same central lozenge, a slight difference in the forehead shield), but with recumbent C-shaped horns, is defined as that of a tiger (Waterbury, Plate 46). In these cases, then, the horns are typologically decisive. But on page 25 Miss Waterbury says: "The most important element, the head of the tiger, also appears in different aspects: – with the horns of the Water-Buffalo, with the capped horns of the Bull sacrificed to the ancestors, with the crooked horns of the Bull sacrificed to the Spirits of the land and grain, with the horns of the Ram." Here she gives up entirely the decisive criterion. What is it then, in these cases, that makes the mask the face of a tiger? This is all methodologically unsound.

The plain fact is that there is a wide range of variation in the mask (bodied or not) which constitutes the principal décor feature of the Yin art. Sometimes it is very nearly a realistic bovine head or a ram's head, but it has none the less nearly always some of the

NUMBER 1 PLATE 1



peculiar symbolic features, particularly the lozenge in the center of the forehead. Sometimes it is a curious mixture of elements from various animals and fanciful elements existing on no living creature, and it is then entirely futile to define it as a certain species. The tiger surely has contributed very little; it has a quite different representation in the Yin art (e.g., Freer Cat., Plate 7).

It is not sure, nor is it even probable, that the artist always had some real, living creature in mind. What he represented was a fabulous, magically powerful being, the paraphernalia of which varied considerably, but which, after all, in all its varieties, makes a surprisingly uniform general impression. This was realized by the Sung-time archaeologists who named the figure *t'ao-t'ie*. The reference, as has often been pointed out, was to *Lü shi ch'un ts'iu*, chapter *Sien shi* (third century B.C.), which says: "On the Ting of the Chou there is applied the *t'ao-t'ie*; having a head but no body he ate people, but before he had swallowed them, harm came to his body." There can be little doubt that the Sung scholars were right in identifying it with the mask on the bronzes, and thus we know that at least as early as the end of the Chou dynasty it was considered to be an ogre mask and had some legend connected with it. This, of course, does not mean that Lü Pu-wei had any knowledge of the Yin-time lore connected with the ogre mask, but the procedure of the Sung scholars in bringing in all the varieties of it under the comprehensive heading *t'ao-t'ie* seems both reasonable and commendable.

Quite analogous is the case of the dragon. The *lung* dragon is a constantly recurring magical animal in the earliest texts, and it would be strange indeed if it were missing on the bronzes. The several varieties of the dragon on the bronzes are so obviously creations of the fancy that it is surely a great mistake to identify them with ordinary, real animals. There is a great and fundamental difference in character between a "beaked dragon" (our Plate 1, Plate 6, etc.) and a "bird" (Plate 2). The former, which Miss Waterbury would consider a bird, is certainly a dragon. Regard, for instance, our vessel 37 (Plate 54). The beaked dragon in the neck belt and the trunked dragon in the foot belt are so allied that no unbiased mind can fail to realize that they are two variations of one and the same idea – that of a dragon; and the trunked variety certainly cannot be mistaken for a bird (this is the dragon which normally goes to form the one half of a *t'ao-t'ie*). In the same way, the "winged dragon" of our Plate 18, etc., which Miss Waterbury would likewise call a "bird," is closely allied to the variety of "trunked dragon" which we have in Plate 52 (foot belt), and there can be no doubt that both these figures are really dragons.

Yin or Early Chou. A style. HEIGHT: 10 1/4 inches. LENGTH: 7 13/16 inches. PATINA: pale green. PUBLISHED: Waterbury, Plate 5.

NUMBER 2. *Square Ting*, RECTANGULAR. PLATE 2

The body of this small vessel is characterized by a principal surface surmounted by a broad upper belt. The former has regular rows of spikes framing, on three sides, a rectangular field which, on a ground of squared spirals, has a variety of the motif "interlocked T's." The pattern lines are executed as narrow bands in very low, flat relief, typical of the B style.

Against the principal surface, the upper belt is strongly set off through several striking features. On the one hand, while the lower part has flanges (with alternating straight and T-shaped scores) only at the four corners, the belt has additional flanges in the center, dividing the belt of the vessel into eight panels; each such extra flange forms the central ridge of a rudimentary *t'ao-t'ie* mask, the face reduced to the nose at the bottom and the hooked forehead shield above (cf., for instance, Plate 18 below). On the other hand, in opposition to the flat relief of the principal surface, the upper belt has antithetical birds in high, rounded relief, with wings almost plastically raised in a higher plane. The bird, with strongly in-curved beak, has a cleft crest and a heart-shaped horn. That this is really a horn is proved by its position (cf. vessel 24 in Plate 36 below). The long tail is shaped in a way which is later on taken up as a regular feature of dragons in the Huai style: it is cleft in one out-curving part halfway and another long curve in the opposite direction at the end, and all along each of these parts there is a deep score in the center. Even the spiral background in the belt, a mixture of rounded, squared, and pointed spirals, contrasts with that on the principal surface.

The cylindrical legs have a décor in incised lines: hanging blades in double lines, the inner ones embellished with C-shaped figures, and, above this, a band with intergripping C-figures. On the outside of the stout handles there are, in the same flat relief as in the rectangle on the body, figures showing an eye, and down-sweeping narrow bands in elegant curves on either side; these figures are really exceedingly disfigured dragons.

The inscription (figure 3) is the same as on vessel 1 above, minus the "fu Ting."

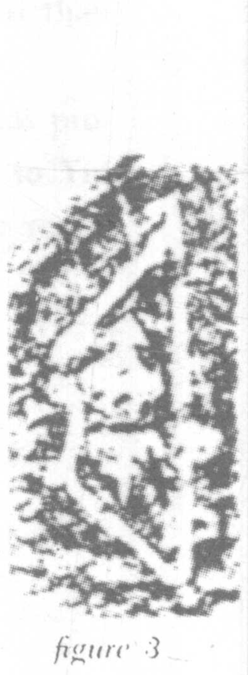


figure 3

Yin or Early Chou. B style. HEIGHT: 8 1/2 inches. LENGTH: 6 5/8 inches. PATINA: blue-green. PUBLISHED: Waterbury, Plate 69.

NUMBER 2 PLATE 2



NUMBER 3. *Square Ting*, RECTANGULAR. PLATE 3

On the principal surface the décor is limited to a broad upper belt. In the center of this there is a rudimentary *t'ao-t'ie* mask (hooked forehead shield) flanked by head-turning dragons, the bodies, tails, and head crests of which are in flat relief, without any filling, against a ground of spirals. On the top of the legs there are forceful *t'ao-t'ie* heads, and the thick, segmented flanges of the upper part, with alternating straight and T-shaped scores, reappear as central ridges of these *t'ao-t'ie* masks on the legs.



figure 4

The inscription (figure 4) reads: "Ki Wu has made Kung Po's precious cooking vessel." (The last character, here written with radical 108 and *ts'i*, "wife," as phonetic, is a variant of the character with radical 206 and *ts'i*, "even," as phonetic; it evidently means "cooking vessel." Cf. Jung, *Shang Chou*, 1:306.) The ductus of the script indicates Early Chou rather than Yin.

Early Chou. HEIGHT: 9 inches. PATINA: grey-green.

NUMBER 3 PLATE 3



NUMBER 4. *Ting* WITH SUPPORTING ANIMALS. PLATE 4

This Ting has several very unusual features and shows exceedingly fine workmanship. The bowl is broad and comparatively shallow. On the body there are three décor belts of approximately the same breadth, the topmost set off from the lower ones by a narrow, undecorated groove and by the lack of the three flanges which, on the two lower ones, correspond to the supporting animals. The middle zone has, on a ground of rounded or pointed spirals, a consecutive row of very realistic cicadas (symbols of resurrection and renewed life) in high, rounded relief. The top and bottom belts have rows of big eyes connected by diagonal lines and a filling, in the side spaces, of C-figures and forklike figures. Probably these complexes are strongly disfigured dragons; they form the prototype of what became, in the B style, the "eyed band with diagonals," though the geometrization of the latter has proceeded further. In contrast to the middle belt, these outer ones have no spiral background, the décor figures being formed by threadlike raised lines.

The supporting animals are boldly modeled birds, with the big, hooked beaks facing outward and big horns, beautifully balancing the beaks, directed inward. Beak and horn are emphasized by incised lines parallel with the contour. The body and wing form a forceful C-shape, and similar incised lines divide up this part in parallel bands in different planes of relief. The long tail ends in an up-curl directed outward; the leg of the bird stands on this curled-up end of the tail. The bold stylization of these birds contrasts curiously with the realistic treatment of the cicadas in the middle belt.



figure 5

The inscription (figure 5) is the so-called *ya* figure, inside which is a *kuo*, "dagger-axe," and *fu Ki*, "[to] Father Ki."

The *ya* figure in the inscription necessitates a commentary. This symbol happens to coincide, in shape, with a character in the classical language (figure 6A) read (in modern Chinese) *ya*, meaning "second, the next-following"; hence from the time of the Sung catalogues it has been customary to read our symbol *ya*. All kinds of theories about this symbol have been advanced. Some authors believe it to be a clan name, but there is not the slightest textual support for this. For one thing, though we know scores of early clan names, we have never found a clan name *ya*. It has even been suggested that this *ya* is Hia (figure 6B), the name of the Hia dynasty. This is phonetically excluded: *ya* was archaic *ag*, *hia* was archaic *g'o*. The only fact which can be stated with certainty is that this symbol in its simplest form, occurring on many vessels (figure 6C), is a faithful drawing of the ritual jade object well known from our jade collections.

A B C D E

figure 6

This object has been convincingly identified, by Wu Ta-ch'eng, with the *ts'ung* jade of the *Chou li*. Whatever its use and meaning may have been (for a discussion see BMFEA. 2:23-33), it is quite certain that the word *ts'ung* (archaic *dz'ông*) is etymologically cognate with *tsung* (archaic *tsông*), "clan temple, ancestral temple," the former being written in classical Chinese as in figure 6D, the latter as in figure 6E. The "radical" to the left is sure to be an elucidating addition; probably the character *dz'ông* was in the Chou era written simply as in figure 6E, without radical (Chou fashion), the addition "jade"

NUMBER 4 PLATE 4



having been made in Han time. In any case, the two graphs (figure 6, D and E) which have the same fundamental element, prove that by the script inventors *dz'ông* (now *ts'ung*) was felt to be a variation, an aspect, of the word-stem *tsông* (now *tsung*), an alternation *ts:dz'* inside an archaic word-stem being exceedingly common and well attested. Thus the word *dz'ông* (modern *ts'ung*) simply means "ancestral-temple object." All this goes to show that we should not be led astray by the fortuitous similarity of our inscription symbol here and the character *ya*, "second," of the classical script. In consequence of its being a drawing of a *dz'ông* (*ts'ung*), the jade emblem whose name simply means "ancestral-temple object," we should no longer read the written symbol *ya* but (in modern pronunciation) *ts'ung*; and wherever it appears on a bronze, it seems probable that it simply means "ancestral-temple object."

Yin. A style. HEIGHT: 7 3/4 inches. DIAMETER: 6 3/8 inches. PATINA: grey-green with patches of brighter green. PUBLISHED: Bull. Minn., 31:10; Comstock, figure 6.

NUMBER 5. *Ting.* PLATE 5

This vessel has very short legs in proportion to the bulky and finely spherical body. The décor, limited to a broad neck belt, is simple: in low, flat relief, antithetical pairs of dragons, the general contours of which are to be seen in figure 7. Thus the leg is raised in front and the tail curled up, the surface, where broad, being cut up into parallel bands. Only in a few small places does this scheme leave space for the traditional spiral filling.

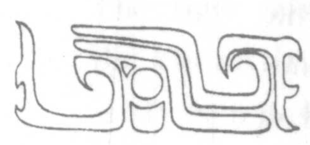


figure 7

Yin or Early Chou. B style. HEIGHT: 6 1/8 inches. DIAMETER: 5 5/8 inches. PATINA: green.

NUMBER 5 PLATE 5



NUMBER 6 PLATE 6



NUMBER 6. *Ting.* PLATE 6



figure 8

The belly is decorated with hanging blades filled with cicadas. The neck belt is divided into panels through rudimentary flanges. In each panel there are two consecutive beaked dragons of the normal type (small crest, big, C-shaped horn), the panels forming pairs with the antithetical dragons. On the belly and in the belt is a ground of squared spirals.

The inscription (figure 8), consists of *yu yi,* two cyclical characters the meaning of which here is obscure. Cf. Lo, *San tai,* II.11.

Yin or Early Chou. A style. HEIGHT: 8 15/16 inches. DIAMETER: 6 3/8 inches. PATINA: green. PUBLISHED: Waterbury, Plate 48.

NUMBER 7 PLATE 7



NUMBER 7. *Li-ting.* PLATES 7 AND 8



figure 9

The belly and neck belt are uniformly divided into panels by low and narrow flanges (corresponding to the legs) which form the central ridges in *t'ao-t'ie* figures, the ground being squared spirals. On the belly is an ordinary bodied *t'ao-t'ie,* with C-shaped horns and a hooked forehead shield, the hooks of which, however, are unusually tiny; the eyes of the monster protrude strongly, being nearly semispherical. The *t'ao-t'ie* is flanked by vertical gaping dragons. In the neck belt there are dragonized *t'ao-t'ie,* the halves formed as winged dragons; the C-shaped horns are connected with the forehead by a vertical line, the result being a T figure.

The inscription (figure 9) has the same symbols as on vessel 2, minus the "bow"; thus a *hiang,* (shrine =) "to offer in sacrifice," and *yang,* "sheep."

Yin or Early Chou. A style. HEIGHT: 8 1/8 inches. DIAMETER: 6 5/8 inches. PATINA: green with patches of red.

NUMBER 7 PLATE 8



NUMBER 8. *Ting*. PLATES 9 AND 10

This eccentric vessel is called Ting by Jung Keng, "hybrid Hsien" by Miss Waterbury (Plate 74). Since there are no holes in the bottom of the bowl, the vessel cannot have been a Hien steam cooker. Possibly the lower part was used for heating with charcoal. The bowl has a broad and shallow shape and the décor in the neck belt is the usual animal triple band—i.e., violently dissolved antithetical dragons, combining to make a *t'ao-t'ie*, with a small flange as central ridge, the eyes still quite clearly visible and also the curled-up tail and the row of quills on the back.

For the rest, this vessel is extraordinary in its principal features. Three figures, in the same supporting position as the birds or dragons which are common on Ting vessels of this type, function as legs. They are strangely modeled, perhaps representing some kind of demons (?): the heads, though very elongated, are human, with well-formed eyebrows, a thick, fleshy nose, and a broad mouth; but on their heads they have enormous, S-shaped horns, elaborated in low relief in parallel bands on the base of the bowl. The bodies are equally remarkable: observe the well-calculated bow-line formed by the shoulder and arm, uninfluenced by the cleft ends which summarily suggest hands. Still more elegant is the continuous flow of S-curves from the neck to the end of the curled-back legs. The delicately balanced lines of abdomen and back twist violently at the haunches before turning back on themselves to form the sinuously curled legs and the terminal, hooflike members. The S-curve from the hip and downward is emphasized by two spiral grooves.

The bowl-like part built in between the backs of these figures has three openings of different types. On one side there is, in incised lines, a *t'ao-t'ie* of the ordinary kind with recumbent C-shaped horns and with round-topped forehead shield; it is the traditional lozenge in the center of the forehead which is here broken through. On each of the other sides there is a similar *t'ao-t'ie* in incised lines, but the whole central part of this mask has been removed and replaced by another *t'ao-t'ie*, of a more bovine type, which forms a kind of separate shield and sits as if detached from the bowl. Perching on each handle are two confronting birds in the round, the curved beaks raised high and balanced by thick rear crests (horns?).

Yin or Early Chou. B style. HEIGHT: 8 1/2 inches. DIAMETER: 5 1/2 inches. PATINA: blue-green. PUBLISHED: Bull. Minn., 26:33; Waterbury, Plate 74; Jung, *Shang Chou*, 2:29.

NUMBER 8 PLATE 9



NUMBER 8 PLATE 10



NUMBER 9. *Hien.* PLATE 11

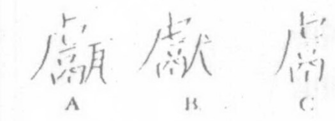


figure 10

It is evident that this kind of bipartite boiler (a Li tripod below, a bowl on top) is identical with the vessel known from early texts as *yen* (figure 10A), and it might seem obvious that we should therefore call it Yen (archaic *ngian*), not (figure 10B) Hien (archaic *xian*), this latter word having "dog" as radical in the graph and meaning "to present." But, in fact, in the inscriptions on vessels of our class, which denote it by a technical name, the graph in a few cases is a bare form, as in figure 10C, with no radical at all; in the large majority, however, it is really the character as it appears in figure 10B, with the radical "dog." It follows clearly that when this vessel was used for sacrificial purposes, it went under a special ritual name – Hien (figure 10B), "the offering vessel," the similarity in sound (*xian*: *ngian*) and graph constituting really a sort of pun of the kind so dear to the ancient Chinese (*siang*, "elephant" = *siang*, "lucky," etc.). We should follow the inscriptions and call the vessel Hien.

On the upper part there is a neck belt with very low and tiny flanges, every second of which forms the central ridge in the face of a dragonized *t'ao-t'ie*, the halves formed as winged dragons, very similar to those on Plate 7. On the lower part (a Li tripod) the bulbs are covered with forceful, almost plastically raised *t'ao-t'ie* heads of a fairly realistic bovine type. The face is well contained and complete: eyebrows, ears, scaly horns; the mouth (the drawn-up lip of which here does not form the common C-line, as, for instance, on Plate 14, but an S-line) shows the fangs. The forehead shield is square-topped. It is common to have such realistic *t'ao-t'ie* on the more plastic bulbs of the lower Hien, simultaneously with the more dissolved *t'ao-t'ie* of the B style in the neck belt. Inside the vessel there is a grid at the bottom of the upper bowl (the vessel being a steam cooker), turnable on a hinge; the plate is perforated by seven cross-shaped slits.



figure 11

The inscription (figure 11) reads: "T'ien Nung has made the precious ritual vessel." The ductus of the script is somewhat more advanced than the common Yin script.

Early Chou. B style. HEIGHT: 15 inches. DIAMETER: 9 1 2 inches. PATINA: grey-green mottled with red. PUBLISHED: Waterbury, Plate 30.

NUMBER 9 PLATE 11



NUMBER 10. *Kia.* PLATES 12 AND 13

The category of vessels usually defined as Kia (a term which frequently occurs in early literature) offers no example in which the inscription of a vessel confirms this denomination. And yet the identification is correct beyond doubt, since the archaic graph for the word *kia* quite clearly depicts a tripod with uprights of our type here. The term has then further been applied to four-legged vessels (e.g., 11, 12 below) which for the rest are closely cognate with the tripod Kia, and this seems quite legitimate.

Our vessel here is three-legged, with the undecorated legs not very strongly spreading. The body is round, the wall strongly S-profiled, the inward curvature of the neck placed far down, so as to give a comparatively high, flaring collar. On the belly, three flanges with simple, deep scores form the central ridges of three dissolved *t'ao-t'ie*. Despite its disintegration, the original figure of the *t'ao-t'ie* contrasting only slightly against the spiral background, one can still quite clearly discern its body, first going out horizontally, then rising vertically and ending in a forceful spiral. As to the face, the mouth line is drawn up so that the in-curving hook is placed close below the eye, the strong horn rises in a big spiral, and at the side of this spiral, in a slightly lower plane, there is one half of the regular hooked forehead shield, which is thus supposed to be partly hidden by the horn.

Below the tails of the two *t'ao-t'ie*, directly under the handle, there are two small dragons with turned heads standing opposite each other. The neck belt has dragonized *t'ao-t'ie* of much the same type as on Plate 11, and above this there is a row of rising blades with a filling of stylized cicadas. The handle is surmounted by an animal's head, which has well-defined features (eyes, nose, big upper lip) and big horns in pointed C-shape. The strands in the latter are in slightly different planes and the outermost is notched with scores, T-shaped, L-shaped, and straight, of the kind that are usual on the flanges of the vessels. The handle itself is, in its top part (which forms the neck of the animal), covered with rows of scales; in its lower part, which starts from the animal's mouth, it is decorated with incised compound spirals in front, with lozenges in low relief on the sides. The uprights, proportionately very big, have as décor a belt of spirals and rising blades like those of the neck, and a whorl circle on the top.

Yin or Early Chou. B style. HEIGHT: 10 5 8 inches. DIAMETER: 7 1 2 inches. PATINA: blue-green. PUBLISHED: Davidson, number 6; Comstock, figure 11.

NUMBER 10 PLATE 12



NUMBER 10 PLATE 13



NUMBER 11. *Kia.* PLATE 14

This vessel is four-legged, with the undecorated legs strongly spreading. The profile of the body is S-shaped, but less pronounced and with the inward curvature placed higher up (nearer to the rim) than in the preceding vessel. The body is oval in section. The décor of the neck belt – dragonized *t'ao-t'ie* (of the winged-dragon type) and rising blades with stylized cicadas – is very similar to that of the preceding vessel, and so is that on the uprights. On the belly, on the contrary, the *t'ao-t'ie* figures are quite vigorous and not at all dissolved, although their low relief and generous filling with spiral lines, etc., tend to weaken the contrast between the figures and the squared-spiral ground. The flanges, which form the central ridges of the *t'ao-t'ie* faces, are very low and thin.

The *t'ao-t'ie* have many of the ordinary features: the in-curving C-line of the mouth, the recumbent C-shape of the horn, the body and raised tail, the tuft where the leg leaves the body, the claws. Observe, however, the alternating T-shaped and straight scores on the horns, otherwise pertaining to flanges, and, more unusual, the hybrid forehead shield: the lower part drawn as the rounded-top shield, the upper part like that of a hooked shield. This hybrid form, however, does not occur in the cleft *t'ao-t'ie* below the handle; there we find one half of the ordinary hooked forehead shield. Observe further the quill over this *t'ao-t'ie's* body, limited to one for lack of space. Straight below the tail of this *t'ao-t'ie* there is, as filling of the corner, a small vertical dragon, further discussed below. On the handle, the head at the top is a fairly realistic bovine head, yet with the traditional *t'ao-t'ie* lozenge on the forehead. The same lozenge is repeated further down. In connection with the bovine head there are curved legs ending in hoofs on the sides of the handle.

In the place for an inscription, under the handle, there is a human figure with some embellishments which may represent a ceremonial cap(?) (figure 12), but it is executed as part of the décor – flat relief on spiral ground.

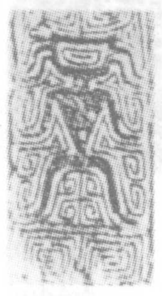


figure 12

A few words should be added here about the small vertical dragon below the *t'ao-t'ie's* tail. There is a common element in the Yin B style which I have called "square with crescents," a purely descriptive denomination. In most cases the center of this figure is formed exactly as the eye of a *t'ao-t'ie* or dragon (figure 13), and it is *eo ipso* probable that the motif is only a violently stylized modification of some animal shape. It is, in fact, the ubiquitous dragon which is at the bottom of the "square with crescents" (the latter having nothing whatever to do with "lunar" mythology and beliefs, as some authors have propounded). The connection is already revealed by stylized dragons like the one in figure 14, in which we see the trunk curling down to the right and the tail raised in a spiral to the left, the dragon representation being unmistakable in spite of the fanciful and playful embellishments. In the center, the eye and its environs have already much that is reminiscent of our "square with crescents." The fundamental dragon nature of this latter is, however, even better demonstrated by our Kia bronze here. It is a regular feature in the A style that a *t'ao-t'ie* is flanked by "vertical dragons." The lat-

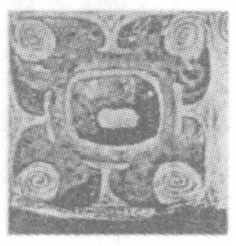


figure 13

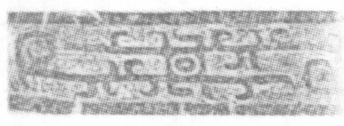


figure 14

ter may be fully and elaborately drawn, as on our Li-ting 7, Plate 8 above, figure 15. We observe there the big eye, the gaping mouth, the C-shaped horn, the body (curving out to the right) and the two tufts along the right side (the belly) forming a C-figure. These features recur, very much simplified, in our small dragon on the Kia here: figure 16. The raised body is very short, not much longer than the small horn, the mouth line has been entirely corrupted: straightened so that the jaws form a straight line, the lower jaw coalesced with the lower tuft of the C-figure. But in spite of these violent corruptions, it is easy to see, on the one hand, the close connection with the vertical dragon on Plate 8, which proves beyond doubt that our small figure here is really a vertical dragon; on the other hand, with the figure "square with crescents." Indeed, the step from our tiny dragon here to a simple form of the "square with crescents" is small indeed, and the dragon origin of the latter is beyond dispute.



figure 15

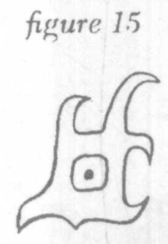
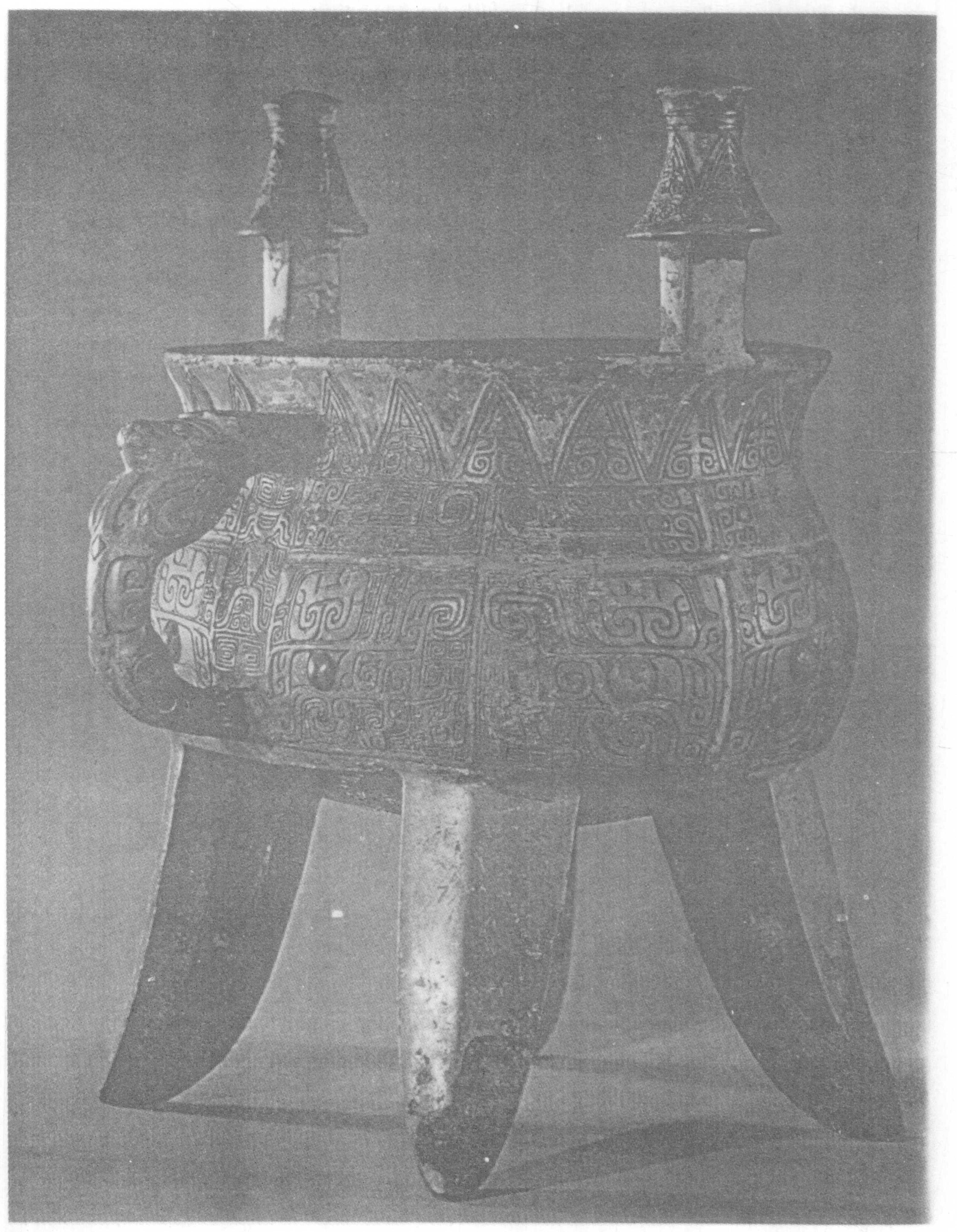


figure 16

Yin. A style. PROVENIENCE: An-yang. HEIGHT: 8 3/4 inches. DIAMETER: 6 3/8 inches. PATINA: grey-green and blue. PUBLISHED: Bull. Minn., 28:22; Waterbury, Plates 2, 23, 50.

NUMBER 11 PLATE 14



NUMBER 12. *Kia,* RECTANGULAR, SLIGHTLY ROUNDED. PLATES 15 AND 16

This vessel has four legs, less spreading than the preceding specimen (11). The profile of the body is much the same as on that one. The flanges on the body are low and narrow, without the regular scores, but, instead, the horns of the *t'ao-t'ie* in the belly décor and parts of the dragons on the feet are decorated with the alternating T-shaped and straight scores otherwise pertaining to flanges. The décor scheme (on a ground of squared spirals) on the body is the usual one: on the belly, bodied *t'ao-t'ie* with hooked forehead shield flanked by vertical dragons; in the neck belt, beaked dragons surmounted by a frieze of rising blades filled with remnants of cicada figures. An interesting feature is the treatment of the vertical dragon. What is ordinarily a gaping mouth has here been exaggerated and broadened, and the upper jaw has been reshaped into a beaked dragon head, the lower jaw into a leg with claws.

On the top of the handle there is a *t'ao-t'ie* head with C-shaped horns and a mouth gaping over a finely drawn cicada. The outer two surfaces of the leg of the vessel go together in taking as décor a long, hanging blade, filled with two antithetical dragons; or, more precisely, a complicated system of antithetical dragons. As we see them on the standing vessel, they are vertically placed with bodies going downward as slightly curving marginal bands and meeting at the point of the leg, embellished, halfway down, with tufts forming a C; they are beaked dragons, turned toward each other, with the beak slightly corrupted and the horns easily discernible above the eyes. (For these dragons and this arrangement, cf. vessel 26 below, Plate 39, the blade on the upper part, as seen from above.) But at the same time each of these heads is playfully provided with a second body, rising vertically (with tufts) and ending in a forceful spiral, from which, again, additional embellishing tufts emanate. For nearly identical dragons on the legs of a Kia in the Art Institute of Chicago, see Umehara, *Seikwa*, Vol. 1, Plate 68, rubbing (the photograph of this vessel in the Chicago Catalogue is poor and shows no details).

The most remarkable feature is the upright, which is square (rectangular) at the base and has the curving-in profile shown by the photograph. It has as décor a spiral band, rising blades with remnants of cicadas, and, on the two top surfaces, two *t'ao-t'ie* masks placed so as to be rightly seen from above.



figure 17

The inscription is shown in figure 17. This symbol was interpreted by Menzies as the equivalent of "to uphold," or "stretcher-bearer," the character to be read *yu*, and to be here "a family name." On the contrary, this symbol, if it is identified at all (Lo, *San tai*, XIV.15, considers it undecipherable), is taken to be the primary form of *hing*, "to rise, to raise" (see Sun Hai-po, *Ku wen sheng hi*, Cheng 6), which seems plausible. The meaning of the word here is, of course, entirely obscure.

Yin or Early Chou. A style. HEIGHT: 13 3/4 inches. WIDTH: 9 inches. PATINA: grey-green. PUBLISHED: Menzies, number 3; Bull. Minn., 34:18.

NUMBER 12 PLATE 15



NUMBER 12

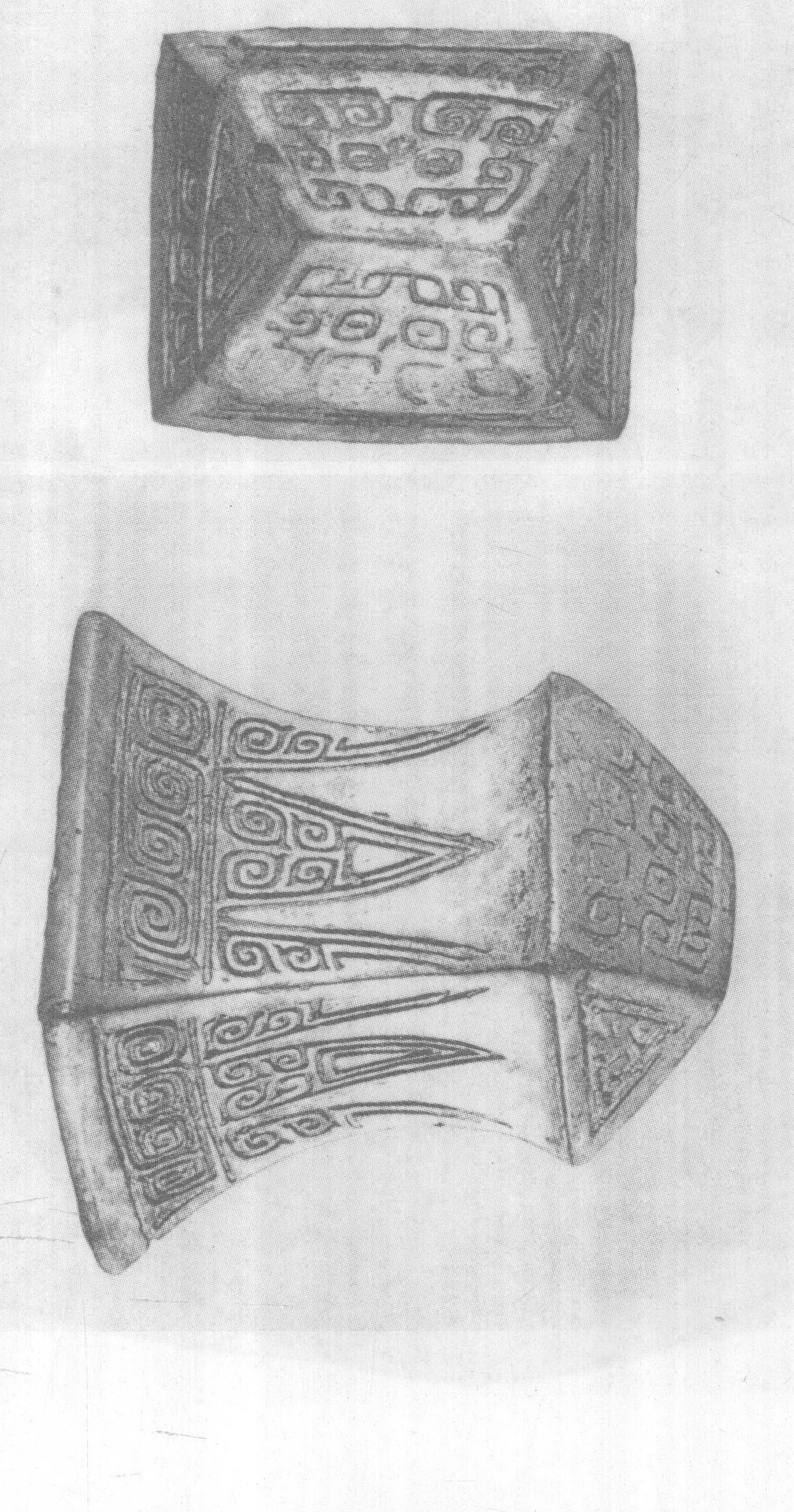


PLATE 16

NUMBER 13. *Tsüe.* PLATE 17

The character for the word *Tsüe* (*Chüeh*), "wine cup (in bird shape)," in the classical texts can be followed step by step backward from the now current form through the "small seal" form of Shuowen and the bronze forms of Chou to the oracle inscriptions of Yin, in which the drawing is unmistakable: it is the kind of vessel which we have here and which from Sung time on has been defined as Tsüe. Thus in spite of the fact that no bronze inscription on a vessel of this kind ever clearly states it to be a Tsüe, the identification is safely established.

A great many specimens of this class are mediocre through ugly proportions and poor work in the detail. The present specimen is an unusually fine representative of its class. The bowl is sufficiently ample and well proportioned, finely balancing the slender and elegantly spreading legs. The flanges are segmented by dense, plain scores. In the principal décor belt there is a strongly dissolved *t'ao-t'ie*: whereas the eyes and ears are still clearly visible, the horns, forehead shield, and C-shaped mouth line are so filled with spirals that they stand out only very slightly against the ground of spirals, nearly coalescing with the latter. On the neck is a row of rising blades, one of them elongated under the spout. On top of the handle is an animal's head of bovine type. On top of the uprights are whorl circles.



figure 18

The inscription (figure 18) depicts a man wielding an axe over a decapitated body – probably a scene of human sacrifice.

Yin or Early Chou. B style. HEIGHT: 13 1/4 inches. WIDTH: 13 1/4 inches. PATINA: blue-green. PUBLISHED: Waterbury, Plate 21.

NUMBER 13 PLATE 17



NUMBER 14. *Wine can*, SO-CALLED "YU." PLATES 18 AND 19

From Sung time down it has been customary to identify this type of vessel with the Yu of the classics, used for holding aromatic sacrificial wine. It is, however, very doubtful whether this identification is correct. No vessel of this type is defined as Yu in its own inscription. When there is any mention of Yu cans with aromatic wine, in the longer inscriptions of Chou time, the graph is always a picture of an asymmetrical vessel (figure 19, A–E), and even the modern graph (figure 19F) still clearly reveals this. That kind of vessel is indeed to be found among the archaeological material—asymmetrical flasks which brilliantly illustrate the graph Yu. There are two such in the Museum of Far Eastern Antiquities (BMFEA, Vol. 20 (1948), Plates 26 and 32), the former in Middle Chou style, the latter in Huai style. (I know of no specimens with an earlier décor.) The contour of the former is that indicated in figure 20. This class, however, has been called Hu by the Sung scholars, and Jung Keng (*Shang Chou*, four examples, pp. 412–413) follows their lead.



figure 19

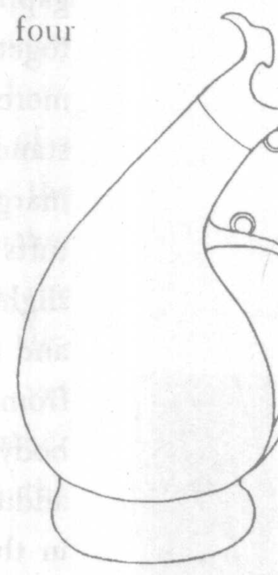


figure 20

Thus we are in the paradoxical position of finding that the vessel which in archaeological praxis is called Yu, but which does not resemble the pictogram Yu in early bronze and oracle-bone inscriptions, belongs to the Yin style and continues in Early Chou, and then died out and does not exist with a Middle Chou or Huai décor; and that, on the other hand, the vessel which tallies nicely with the pictogram Yu in Early Chou and Yin inscriptions has so far been found only in specimens with a Middle Chou or Huai décor. The riddle of the Yu of the classics is therefore entirely unsolved, and when we follow the praxis of the Chinese archaeologists and use the term Yu for the present class of vessels, this is a conventional makeshift—hence we shall here indicate such purely conventional names by quotation marks—and does not authorize us to conclude that vessels like this were used for the various functions in which the Yu occurs in the classical texts.

The present "Yu" is broad and oval in section, with the bow-shaped handle attached to rings at the ends of the oval. The décor belts on the lid and the foot are divided into four panels by flanges, the corresponding neck belt by the handle ring and by free animals' heads. The belly and the cupola of the lid, on the contrary, are divided only into two great fields, by two unsegmented flanges at the ends of the oval. The décor is throughout in fairly high, somewhat rounded relief on a bare ground, which latter is unusual in this vessel class. The narrow belts have two consecutive winged dragons in each panel, those in one panel placed antithetically to those in the next. The principal surface on the belly has a bodied *t'ao-t'ie*, with the vertically rising body and the leg detached from the head. This head is forcefully modeled: the S-shaped mouth line, with fangs showing, the nose and hooked forehead shield, ears, and horns, are only very sparingly embellished with incised lines. The horns have such lines, alternately straight and T-shaped as is usual on flanges. The *t'ao-t'ie* on the lid (with the body strongly reduced) faces the same way as that on the belly, having the mouth toward the rim and the top

NUMBER 14 PLATE 18



NUMBER 14



PLATE 19

NUMBER 15. *Wine can,* SO-CALLED "YU." PLATES 20 AND 21

This vessel is one of a remarkable pair of which Jung Keng has published one (without lid) in a photograph in *Shang Chou* (2:349) and the other in a very poor rubbing figure *ibidem* (1:423). Both were published in a drawing in *Si Ts'ing ku kien* (xv.10, 11), both thus having belonged to the Imperial collection. They are not identical, the lidless specimen having no "free animal's head" in the neck belt. The one given in a rubbing by Jung, on the other hand, would seem to be the vessel which has come to the Pillsbury collection, unless this is a third one in the group, hitherto entirely unknown.

Our "Yu" here has the shape of an ordinary broad "Yu" with oval section and high, concave rim below the dome of the lid; there are a ring-shaped knob and two toothlike projections at the ends of the oval of the lid, these latter corresponding to the rings for the handle in the body. The neck belt is divided into four parts by these rings and two free animals' heads; the corresponding belt on the lid has no such heads. The belts are filled with antithetical deer, in high, rounded relief on a bare ground. Their formation evinces a decided influence from the Northern Nomad animal style. On the ends of the handles there are rams' heads, and on the handle bow, between three lozenges in high, angular relief, *t'ao-t'ie*-like figures in narrow, thread relief. One sees the nose and the eyes and, above these, some deerlike horns, in double lines; from the chin on either side issues a body which has no space to be spread out horizontally but is squeezed in downward, a typical, summarily drawn dragon body. For an analogous configuration of a handle *t'ao-t'ie*, see number 18, Plate 25 below.

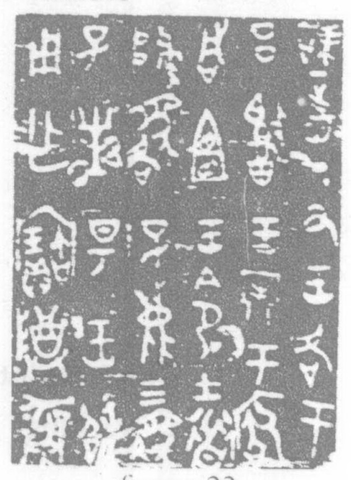


figure 22

The inscription of thirty-six characters (figure 22) is the same on both the known vessels. Jung Keng leaves the tenth, the fourteenth, and the fifteenth unidentified. Liu Sin-yüan (*K'i ku shi*, VI.14) reads the fifteenth *hien*, "all." If we accept this, the interpretation will be: "In the first month on the day ting-ch'ou, the King went to Lü-X. The King made a *lao*-sacrifice (*suovetaurilium*) in X, all being correct. The King ordered Shï Tao to present the prince of Mo deer, three piece. The prince of Mo respondingly extolled the King's grace, and so made this precious vessel." The character in figure 23A ordinarily is read *ho* (archaic *g'lak*), "badger"; but it has early been used as a variant for the character in figure 23B, *Mo* (archaic *măk*), the name of a northern tribe and figuring in Ode 261; with the former variant graph, just as in our inscription, we find it in *Mencius*, 6 B. From the context in Ode 261 it is clear that it was a northern people, probably in the northern parts of the present Shansi or Hopei.

貉 貊

A B

figure 23

Early Chou. HEIGHT: 8 1/2 inches. WIDTH: 8 3/8 inches. PATINA: silvery green with patches of red. PUBLISHED: Bull. Minn., 30:14; Jung, *Shang Chou* (see above); Comstock, figure 10.

of the head just below the knob; thus it is not inverted, to be seen from above, as is so often the case on these vessels.

The most remarkable feature of this bronze is the animal head on the end of the handle. Its main features resemble those of a *t'ao-t'ie* (even to the lozenge on the forehead), but the horns are highly eccentric. Basically they are the well-known "bottle horns," with the bulbous lower part embellished with spiral and zigzag incised lines. But the top of the horn is flattened out into a five-fingered leaf, in the center of which is a big eye in the same high, rounded relief as in the animal's face. This kind of horn with finger-leaf top is not unique, but it is rare. We find it, in the same position and in almost exactly the same execution, on a "Yu" in the Freer Gallery (Freer Cat., Plate 29); on that vessel the birds in the décor of the belly likewise have horns that are only slightly modified relief forms of the same peculiar horns, which on the handle are plastic. We find these same horns on the handles of a "Yu" in the Eumorfopoulos collection (Eumorfopoulos Cat., Vol. 1, Plate 22), on one in the Metropolitan Museum, New York (Umehara, *Seikwa*, Vol. 1, Plate 3), on a square Yi (*ibid.*, Plate 47), and on dragons in the relief décor in a belt on our P'an vessel 38 below.

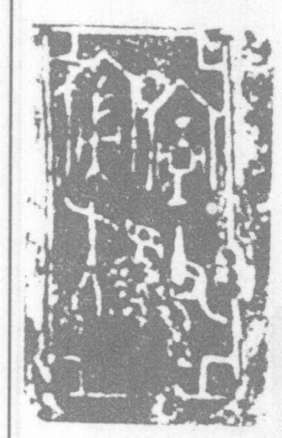


figure 21

The inscription is shown in figure 21.

Yin or Early Chou. A style. HEIGHT: 8 3/8 inches. WIDTH: 7 5/8 inches. PATINA: green with patches of brown. PUBLISHED: Bull. Minn., 26:33; Karlgren, New Studies, Plate 16; Ch'en, Style, Plate 3.

NUMBER 15 PLATE 21



NUMBER 15 PLATE 20



NUMBER 16. *Wine can*, SO-CALLED "YU." PLATES 22 AND 23

This vessel is a broad "Yu" with oval section and a high concave rim below the dome of the lid. The bow-shaped handle is attached to the neck belt of the body in the middle of the long side of the oval and is terminated by an animal's head with bottle horns. The rich ornamentation of this vessel is disposed in seven horizontal belts: one on the foot, three on the body, and three on the lid. The foot belt, the two lower body belts, and the two belts on the dome of the lid are divided into four vertical panels by thick flanges with alternating straight and L-shaped scores, and with toothlike projections. In the neck belt there are flanges only in the middle of the long sides of the oval (forming central ridges of rudimentary *t'ao-t'ie*); on the short sides of the oval the flanges are ousted by the handle attachments. In the rim belt of the lid, on the contrary, it is in the middle of the long sides that they are missing, replaced by turned-up hooks (beaks), on the under sides of which there are cicadas in incised lines. The foot belt, the bottom belt on the body, and the rim belt on the lid have, against a ground of squared spirals, antithetical birds of three different types. The neck belt on the body and the lower belt on the dome of the lid have antithetical dragons of two kinds. The middle belt on the body and the top belt on the lid have vertical ribs, which are typical of the B style. The knob is conical, with incised cicadas all round. The handle has very elongated gaping dragons.

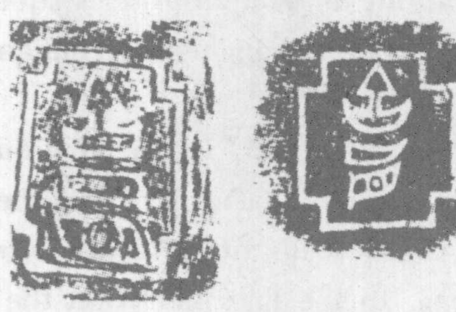


figure 24

The inscription is shown in figure 24. Inside a symbol *ts'ung*, "ancestral-temple piece" (i.e., "ya hing"), there are some undecipherable characters (the lowest "eye").

Yin. B style. HEIGHT: 10 1/4 inches. PATINA: grey-green with patches of sharp green.

NUMBER 16 PLATE 22



NUMBER 16 PLATE 23



NUMBER 17. *Wine can*, SO-CALLED "YU." PLATES 24 AND 25, LEFT HALF

This vessel is, like the preceding two, of the broad type, with oval cross section, but it is taller than they, owing to the exaggeratedly high collar of the lid. It has a spherical knob, and animals' heads at the ends of the handles, which, besides the lozenge on the forehead, have the bottle horns common on *t'ao-t'ie*. The bulbs of these horns are adorned with incised cicada-like figures that leave a lozenge in the center.

Miss Waterbury (*op. cit.*, p. 53) proposes that this type of horn should be termed "capped horn," because in Ode 300, st. 4, Legge translates: "In summer the bulls for it [i.e., the sacrifice] have had their horns capped." Miss Waterbury believes that the horns here show such a "cap." This, however, is inadmissible, for the earliest direct description of the *pi-heng* placed on the bull's horn, that of Mao Heng (second century B.C.), describes it as a crosspiece of wood tied across both horns, and it is important to observe that etymology confirms this: *heng* means "transverse, a crosspiece," and a "cap" such as Miss Waterbury imagines could not possibly be termed a *heng*. (In Sweden a horizontal crosspiece over the tips of both horns of a bull, to prevent him from goring, is still in use.)

The décor scheme is simple: three nearly identical belts on foot, neck, and lid, the only difference being that the neck belt is sectioned by a free animal's head, whereas the other two have merely vertical lines (representing flanges) in relief hardly higher than the dragon figures filling the belts. These dragons, on a bare ground, have an S-shaped body, turned head, and large, S-shaped crests (or horns?).

Yin or Early Chou. B style. HEIGHT: 10 inches. WIDTH: 7 7/8 inches. PATINA: green and blue-green.





NUMBER 18. *Wine can,* "YU"; BETTER, HU. PLATES 26 AND 25, RIGHT HALF

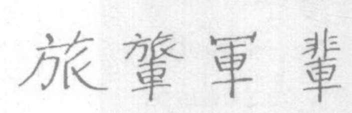
This vessel is a tall type, with a round cross section. The shape of this and the following vessels has nothing to distinguish it from that of a Hu flask. It has become customary to call the vessel "Yu" if it has a bow handle, Hu if it has not.



figure 25

Our present vessel has a dome-shaped lid with a ring-shaped knob and no collar. Its décor is limited to three bands in low, discreet relief. That on the foot is an eyed band with diagonals. The belts on neck and lid, bordered by circle bands, have the "animal triple band," which is really a highly dissolved bodied *t'ao-t'ie* with a row of quills on the back. The flange which forms the center of the face is still there, though reduced to a very tiny ridge, and one can still discern something of the forehead shield. On the handle, the ends of which are adorned with rams' heads of much the same type as on vessel 15, there is the same kind of curiously cramped *t'ao-t'ie* as on that vessel: the nose, eyes, and rounded forehead shield are easily seen; the deerlike horns form, in their lower part, straight lines with the vertically descending bodies (adorned with tufts).

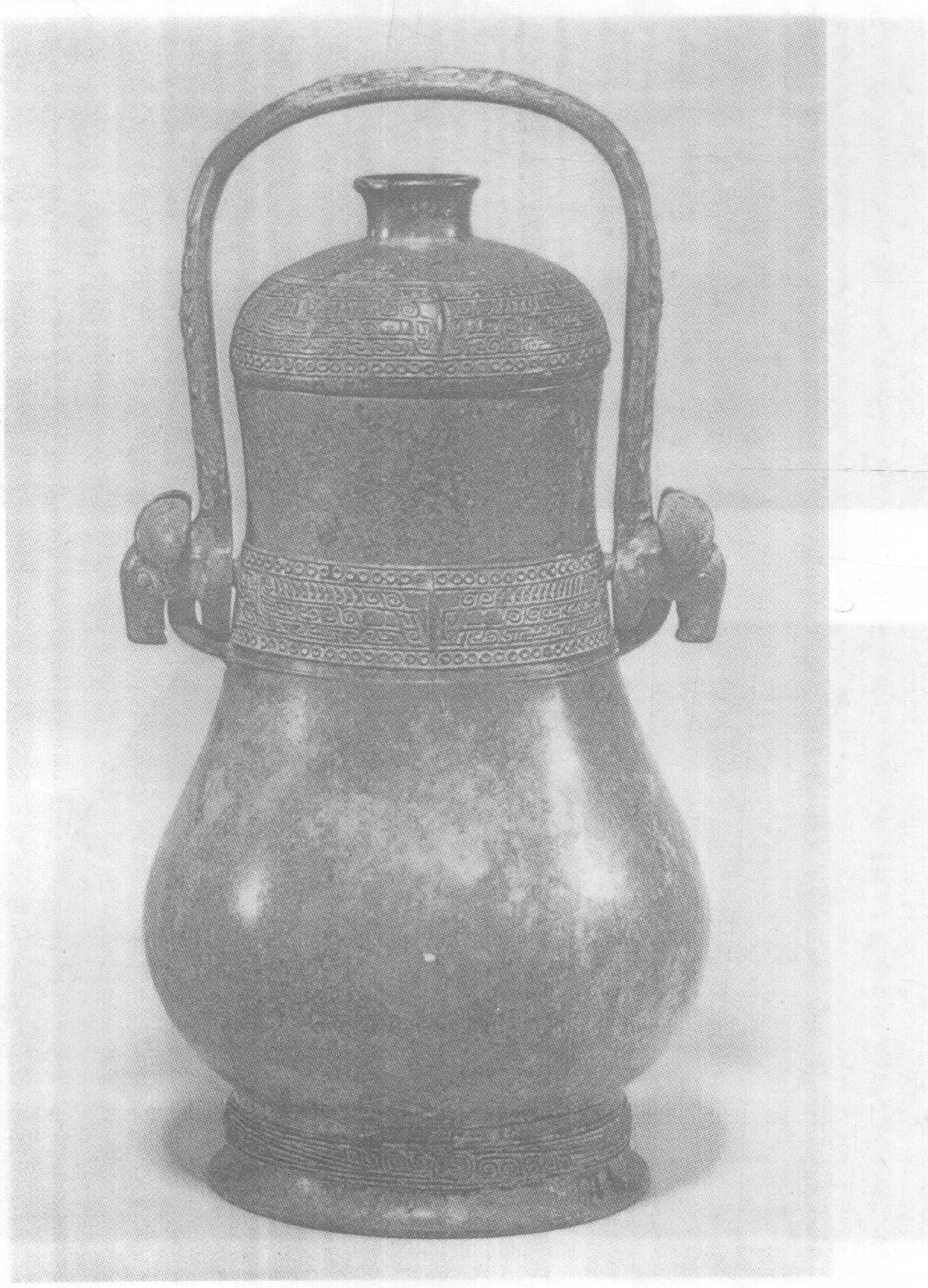
The inscription is shown in figure 25. Over the characters *fu Sin*, "[to] Father Sin," there is a symbol which is enigmatic. There can be no doubt that this graph is identical with the character *lü* (figure 26A), which in somewhat later bronze inscriptions often occurs written with the addition of the radical "carriage" (figure 26B) and frequently as an epithet to a word meaning "vessel": *lü yi*, *lü kuei*, etc. The difficulty is that the word *lü* has many meanings. The fundamental meaning is "a troop" (the graph here shows a group of men around some kind of banner pole). By extension of meaning, it can mean "to travel, a traveler" (going by caravan, in a troop – to this day the Chinese mode of traveling); and it can be the name of a certain kind of sacrifice: properly, then, troop sacrifice, rite performed by a host, a group of officiants. The difficulty is to know which of these meanings it has in the bronze inscriptions. Some authors seize upon the fact, just mentioned, that in many inscriptions the graph has the addition of the radical "carriage" and conclude that it here means "to travel"; thus *lü yi* = "traveling vessel." But that is far from conclusive. The variant with "carriage" already applies to *lü* in its fundamental sense of "troop," just as the graph for *kün* (figure 26C), "army, troop," contains the element "carriage" = a "troop" consisting of a war chariot with an escort of foot soldiers. In the same way the graph for *pei* (figure 26D), "a host, a group, a class, a category," contains the radical "carriage." "Traveling vessel" seems little plausible. The choice is between *lü yi* = "group vessel" – i.e., one of a series – or "sacrificial vessel," the term *lü* for a special kind of solemn sacrifice then being extended to mean "sacrifice" generally. Liu Sin-yüan (*K'i ku shï*, I.18) champions this last view. And since it is here invariably a question of ritual bronzes, the meaning *lü yi* = "sacrificial vessel" certainly is most natural. On our present bronze *lü* alone gives the same idea: "[vessel for] sacrifice."



A B C D

figure 26

Yin or Early Chou. B style. HEIGHT: 9 7/8 inches. WIDTH: 5 1 4 inches. PATINA: grey-green. PUBLISHED: Bull. Minn., 31:10; Karlgren, New Studies, Plate 46; Comstock, figure 9.



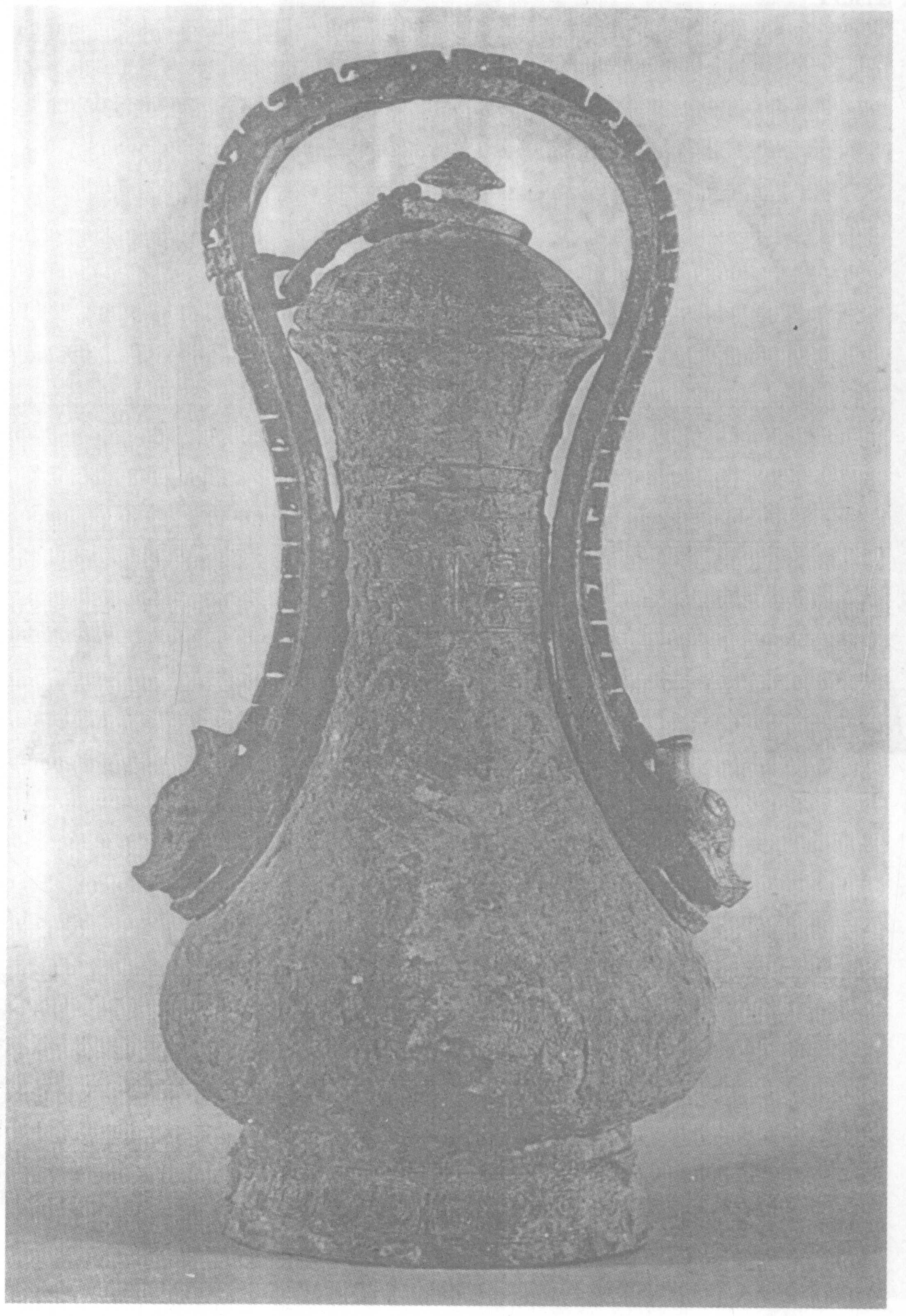
NUMBER 19. *Wine can,* "YU"; BETTER, HU. PLATES 27 AND 28

The praxis of calling such a vessel as this or the preceding one "Yu" if it has a bow handle, Hu if it has not (a praxis which entails that there be no Yu in Middle Chou and Huai, and practically no Hu anterior to Middle Chou) is, of course, entirely arbitrary. It is all the more arbitrary as we do not know whether even the broad type of wine can is really what the classics call Yu; see vessel 14 above.

Our shape here is that of a Hu flask, remarkably fine in profile. There is a curious contrast in the opposition of the slender, softly curving vessel and its bold, somewhat heavy and forceful handle. The big animals' heads have bottle horns adorned with zigzag and spiral lines, and the handle has a décor which is cognate with the common "compound lozenges" pattern. The handle has a flange (an unusual feature) with deep, cut-through scores, alternately straight and L-shaped. The lid, domed, collarless, and with a conical knob, is attached to a ring in the handle through a curled-up dragon whose body encircles the knob; it is a gaping dragon with the body covered with double rows of scales. The décor of the vessel itself is very sparing: there are bands with pointed spirals on lid, neck, and foot. Beneath that on the neck there is a somewhat broader belt with a dragonized *t'ao-t'ie* in low and discreet relief; its central ridge forms a very slight flange.

Yin or Early Chou. B style. HEIGHT: 12 1/16 inches. WIDTH: 5 7/8 inches. PATINA: blue-green, with marks of mat wrapping. PUPLISHED: Bull. Minn., 26:33.

NUMBER 19 PLATE 27



NUMBER 19





PLATE 28

NUMBER 20. *Wine can,* "YU"; BETTER, HU. PLATE 29

In accordance with the customary (but arbitrary – see the preceding vessel) terminology, this vessel is called "Yu" because it has evidently had a bow handle, now lost, attached to the rings. The tall body has the bulbous shape of a Hu and is round in cross section. On the semispherical lid, which has a band of spirals as the sole décor, there is a bird with spread wings and bottle horns, held to the lid by a rivet with a flat, round head. The décor on the body is exuberant, typical of the A style as opposed to the discreet B style, well exemplified by the preceding vessel (19). The ground is of squared spirals throughout. The tall neck has, just above the rings, a narrow belt with an ordinary *t'ao-t'ie* flanked by whorl circles. Above this there is a high zone containing a *t'ao-t'ie* with the various features detached from each other, but still quite effectively making up the face: nose and hooked forehead shield (scored in the way common on flanges), eyes and brows, C-shaped mouth line.

Most interesting are the S-shaped horns, here formed into snakes. The belly is divided by flanges into four panels. In just the same way as ordinarily in *t'ao-t'ie* faces, such a flange forms the center of a face, here an owl's face, with the beak protruding plastically from the flange. There are two leaf-shaped horns and two enormous, circular eyes, the pupils of which have probably been represented by precious stones, now lost, or perhaps by some inlay; the iris stands out in high, rounded relief, the environing parts being marked by scales and slanting lines. On either side an owl's body goes out, the wings again adorned with scales. The thigh, a broad spiral, and the leg, which goes down into the foot belt, are drawn very stiffly. That the owl – at the same time one owl seen *en face*, and two owls seen in profile – here corresponds in function to the more common *t'ao-t'ie* is emphasized by the fact that it has the usual flanking animals: the head is flanked by vertical dragons which turn their gaping mouths toward the owl's eyes. Behind these, again, are two smaller vertical dragons of the ordinary kind (not visible in our photograph). Further down, under the owls' tails, there are head-turning dragons, and in the lowest belt there are snakes flanking the owls' feet. The outer contours of the eyes and the shoulders are delineated in a thin, very high relief, an interesting and unusual technique.

Yin or Early Chou. A style. HEIGHT: 10 7/8 inches. WIDTH: 5 inches. PATINA: sharp green. PUBLISHED: Waterbury, Plate 65.

NUMBER 20 PLATE 29



NUMBER 21. *Wine can,* "YU"; BETTER, HU. PLATES 30 AND 31, LEFT HALF

This vessel has been called (by Jung Keng) a Hu flask, because, though it has quite the same shape as various tall "Yu," its small ears cannot very well have had any bow handle attached to them, but were probably made only for passing a cord. As stated under vessel 19, this distinction between "Yu" and Hu is quite arbitrary, since we do not know for certain even what an ancient Yu was like (the pictogram indicating rather an asymmetrical flask than the vessel class which now generally passes under the name of Yu; see under vessel 14 above). It is therefore quite probable that all the tall, flask-like specimens, like our vessels 18–20 above, should be styled Hu, rather than "Yu." That the term Hu is really a correct name for a tall, flask-shaped vessel is amply confirmed by various bronze inscriptions on such flasks, in which they are called Hu.

The lid of our vessel, and its knob as well, are almost conical, both adorned with whorl circles, on the lid in relief, on the knob in incised lines. The belly is covered with a décor in low relief. Further, there is, on a ground of squared spirals, a geometrical pattern which is akin to the common motifs "compound lozenges" and "interlocked T's" but is not identical with either. It is also affined to the décor patterns of the white ceramic wares of An-yang; cf. the splendid Lei of the Freer Gallery (Waterbury, Plate 26). Another point of contact with that pottery vessel is the next band with strongly stylized dragons. An unfamiliar eye might doubt that the big eye in our photograph is that of a dragon, but in fact its beak goes downward to the right and its tail is raised to the left. The Freer vessel shows this more clearly – figure 27 – and the shape occurs in a still simpler form – figure 28. Another variation of the same theme, we have already studied under vessel 11. As pointed out there, it is from various kinds of stylized representations of dragons that the common motif "square with crescents" has been derived; if we cut out the central part of our dragon here, we have something very much akin to that apparently enigmatic motif. Even more evident is this on our next vessel (22) (figure 29), where the dragon nature of the shape is revealed exclusively by the very slight downward turn on the left (beak) and the equally slight upward turn (tail) on the right. The figure is very nearly an achieved "square with crescents." Still further up on our "Yu" there is a simple belt of S-spirals, bordered by circle bands. Of the perforation on the foot no definite explanation has been found as yet (vent for fumes from burning charcoal?).

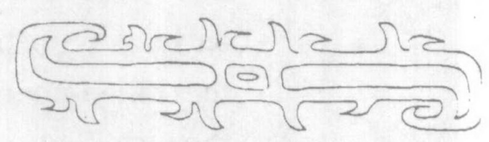


figure 27

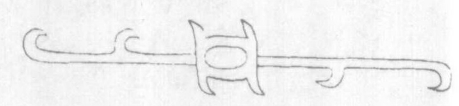
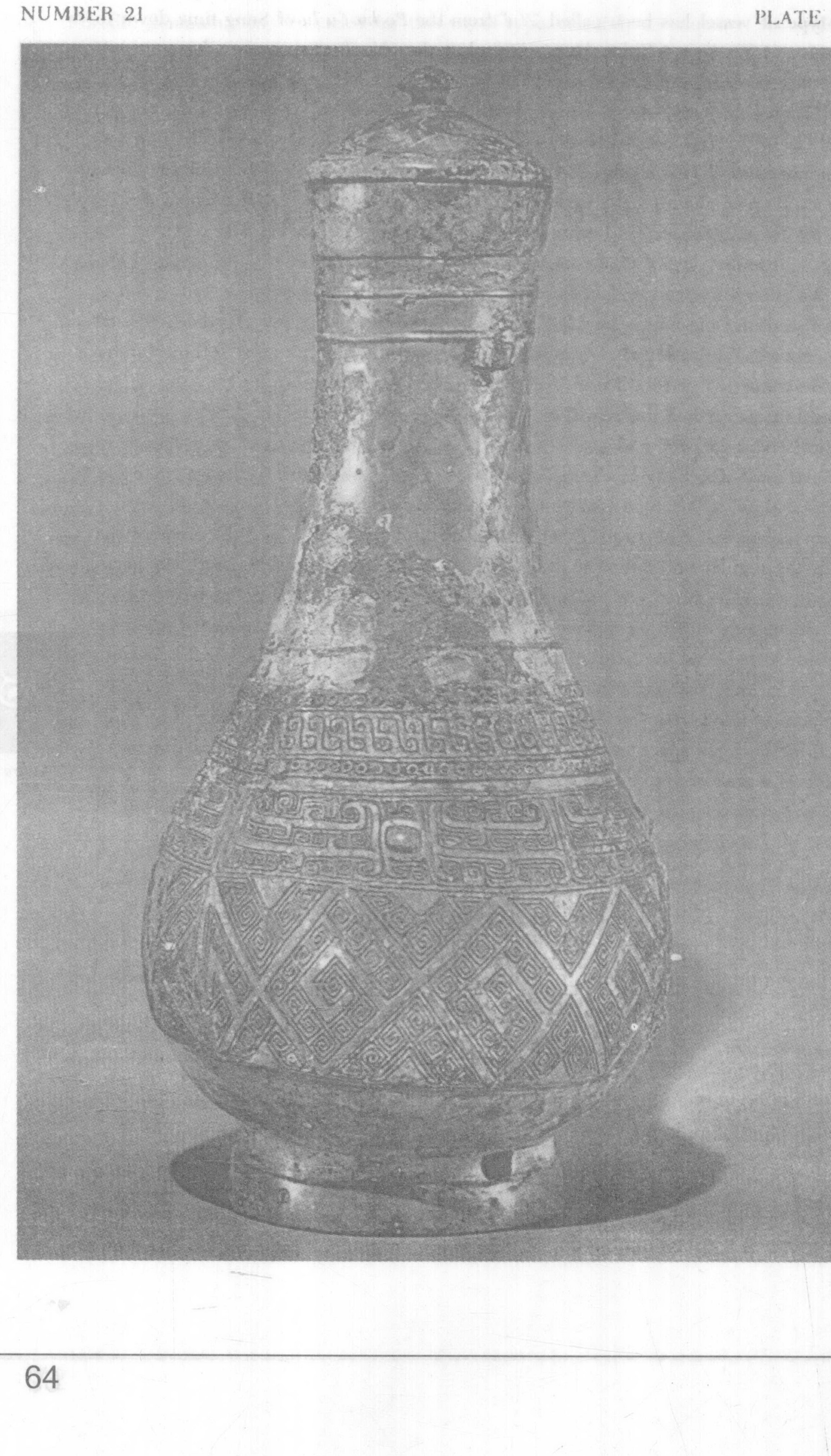


figure 28

Yin or Early Chou. B style. HEIGHT: 10 3 8 inches. WIDTH: 4 3 4 inches. PATINA: grey-green. PUBLISHED: by Jung Keng as belonging to Yü Sing-wu's collection (*Shang Chou,* 2:375); Waterbury, Plate 13.

NUMBER 21 PLATE 30



NUMBERS 21 AND 22



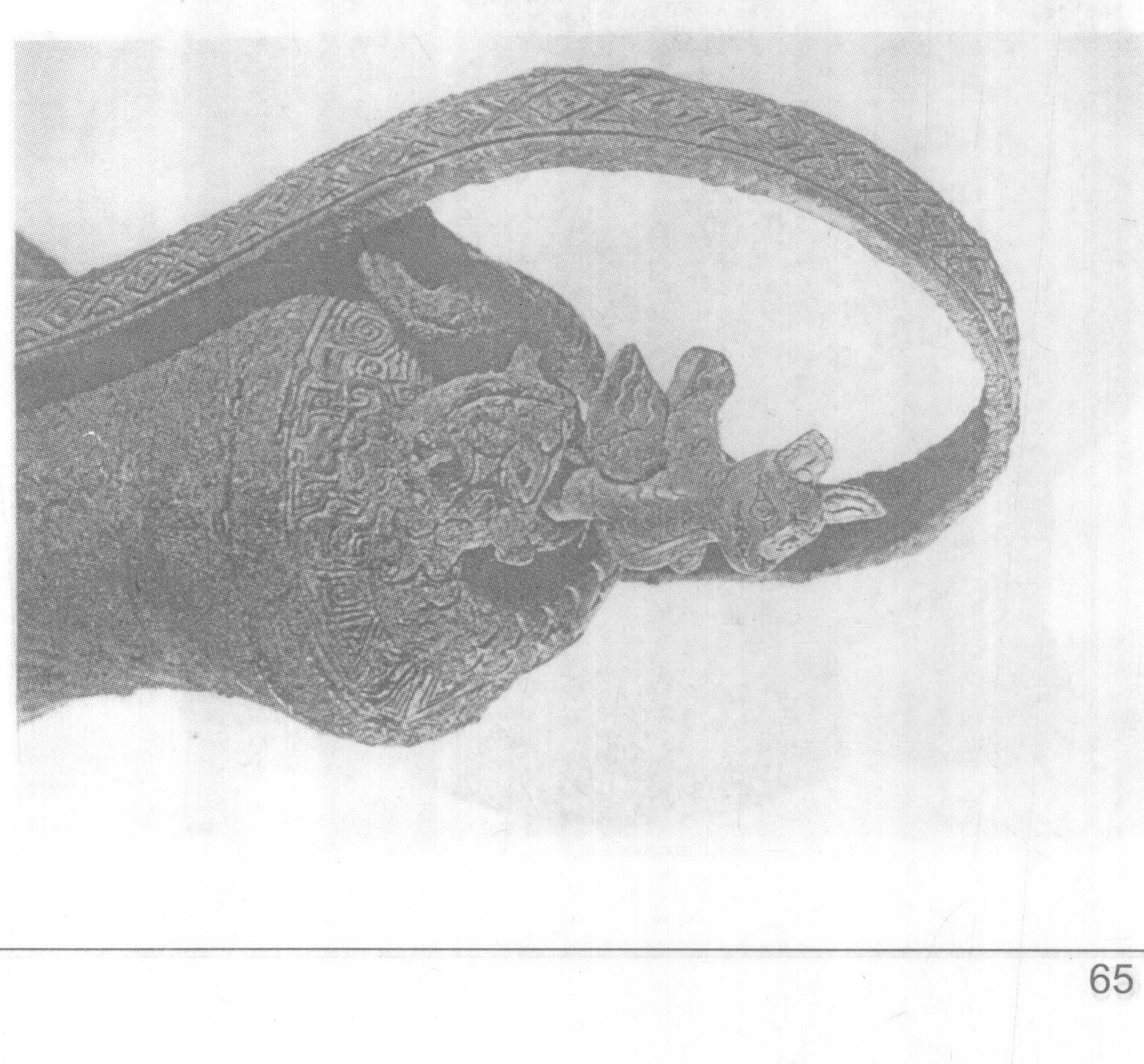


PLATE 31

NUMBER 22. *Wine can,* "YU"; BETTER, HU. PLATES 32, 33, AND 31, RIGHT HALF

In shape this vessel is a highly remarkable one. Square "Yu" are exceedingly rare, and this combination of a round foot, lid, and neck – the graceful profile of the last being emphasized by the elegant bow handle – with a square body is unique. The domed lid has a simple décor of rounded and pointed spirals. In its center stands a bird with spread wings and big, leaf-shaped ears, or perhaps rather horns, since this is the orthodox position of the horns (cf. the owl on our vessel 20). The lid is attached to a ring in the handle by a coiled, horned dragon, whose mouth encircles the feet of the bird and whose tail grips the ring. The animal's head on the end of the handle has much the same horn as the bird above. The handle is adorned with a lozenge pattern.

The square body has, on a complicated ground pattern of squared and round spirals, an interesting variant of the *t'ao-t'ie*: the nose and hooked forehead shield are as usual, but the mouth has the lower lip and jaw drawn as well, which is rare. Flanking the mouth there are two dragons reduced so as to be nearly unrecognizable (figure 29). (Yet cf. the discussion under vessel 21.) The décor on the shoulder is, again, unusual. In the center, in low, flat relief, there are the nose and rounded forehead shield of a *t'ao-t'ie*, dividing the side into two halves. But each such half goes together with the next half round the corner. These two together make a dragonized *t'ao-t'ie*, which is strongly on its way to becoming entirely dissolved; the corner line forms the center of the face; the rolled-up nostrils and the forehead shield are still easily recognizable, as are also the eyes. The raised body and the tail, the latter ending in a downward spiral, contrast only weakly against the background. The foot has a simple pattern of combined spirals.

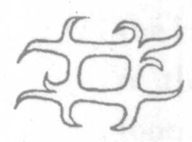


figure 29

Yin or Early Chou. Mixed style. HEIGHT: 12 3/4 inches. WIDTH: 5 3 4 inches. PATINA: green. PUBLISHED: Bull. Minn., 31:10; Comstock, figure 8.

NUMBER 22 PLATE 32



NUMBER 22 PLATE 33



NUMBER 23. *Wine can* IN DOUBLE-OWL SHAPE. PLATES 34 AND 35

This type of vessel has been called "Yu" from the *Po ku t'u lu* of Sung time down to recent years (Jung Keng, Ch'en Meng-chia), but the classification was a desperate attempt by the learned Sung commission to insert an aberrant vessel-type into one of the common and regular categories and so provide it with a technical name. With the vessels, like numbers 14 to 17 above, ordinarily termed "Yu" (itself a weakly founded denomination; see under vessel 14) it has nothing more in common than its evident character of a wine vessel, its oval shape, and its bow handle (possibly also a similarity between its beak on the lid and the projections on the lid in 15). But for the rest it is anything but analogous; particularly its legs alienate it strongly from the so-called "Yu" group. The bow handle is all very well, but our next specimen (24) is quite the same type (and is called "Yu" by Jung and Ch'en), yet has no handle at all and is thus even further removed from the pseudo-Yu prototype. I can see no advantage in attributing a technical term like "Yu" to these owl vessels. There is nothing whatever to corroborate that the Yu of the classical texts ever had this shape.

Two owls back to back and coalesced form this vessel. Over the short, stout legs, very summarily treated, the belly of the vessel forms the bird's body, with the wings expressed in low relief with a few modeling lines. The domed lid forms the bird's head, with a coarsely modeled, turned-up beak. But instead of the features of a bird the dome of the lid carries the regular features of a *t'ao-t'ie,* likewise in low, flat relief (with no background pattern). The knob, with an almost conical top, barely goes free under the bow handle, which ends on either side in a stout and forceful animal's head with forehead lozenge and bottle horns, the latter incised with spirals and zigzags in the regular fashion. In three places the bow has lozenges in high, angular relief. The space between two such lozenges is filled with two cicadas facing away from each other, with their tails coalesced. In the small space between the lozenge nearest the end and the big terminal head there is a smaller animal's head in relief.

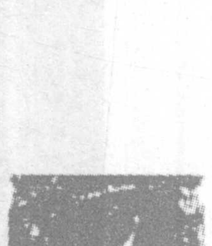


figure 30

The inscription (figure 30) consists of one single symbol, which is considered undecipherable by Lo Chen-yü (*San tai,* II.5).

Yin or Early Chou. HEIGHT: 6 5/8 inches. WIDTH: 5 5 8 inches. PATINA: light green. PUBLISHED: Waterbury, Plate 61; Ch'en, Style, Plate 2.

NUMBER 23 PLATE 34



NUMBER 23 PLATE 35



NUMBER 24. *Wine can* IN DOUBLE-OWL SHAPE. PLATE 36

For the denomination "Yu" used for this vessel type, certainly a misnomer, see under vessel 23. In general shape the present vessel agrees closely with the preceding (23), but deviates from it in some respects: the knob is not conical but flattened, the bird's beak is not turned up; and the vessel has no handle. Moreover, the richness of its décor stands in strong contrast to the terse simplicity of the décor of vessel 23.

Here the entire vessel is covered with décor, the only exception being the back surfaces of the short legs. The groundwork is spirals, rounded or squared as required by the space to be filled. The rims of body and lid are bordered by circle bands. On the body the median line of the long side is emphasized by a free animal's head on the neck, by a *t'ao-t'ie* in low, flat relief far down toward the bottom. On the owl the shoulder line is boldly stylized into an enormous spiral from which the wing quills go out in narrow parallel bands; neck, shoulder, and quills are covered with scales. The tail protrudes in a short downward hook behind the quills. The free head on the neck is flanked by two birds, having cleft crest, bottle horns, and tail covered with scales. The bottom surface of the vessel (not visible in the photograph) is entirely covered with scales in parallel rows. The owl, which in its enormous eyes has the ring outside the iris covered with scales, is provided with big, C-shaped horns of the ordinary *t'ao-t'ie* type, the outer margin of the horn having scores such as usually occur on flanges. The short, stout legs are decorated on the front side with coiled dragons.

Our vessel is strongly affined, in many respects, to an owl vessel in the Freer Gallery of Art (see Freer Cat., Plate 11).

Yin or Early Chou. HEIGHT: 7 inches. WIDTH: 5 7/8 inches. PATINA: bluish-green. PUBLISHED: Bull. Minn., 37:14.

NUMBER 24 PLATE 36



NUMBER 25. *Slender wine beaker,* "KU." PLATES 37 AND 38

The term "Ku" applied to this kind of vessel, from the Sung catalogues to the most recent works, is possibly a misnomer. In no inscription is this kind of vessel called a Ku, and as to the Ku occurring in classical texts, there is no indication whatever that they had this shape.

The present specimen is typical of its class and of a high quality. The central part, on many vessels of this category fairly bulbous, is here quite straight, the foot rather broad, and the mouth only moderately flaring. The densely scored flanges are limited to the "bulb" and the foot, a regular feature in this class.

The décor on the foot, on a ground of squared spirals, consists of a mask *t'ao-t'ie* (i.e., without body and with only a rudiment of a leg), with C-shaped mouth line, hooked forehead shield, small eyebrows, and S-shaped horns. Above this is a narrow band with consecutive trunked dragons. On the central part the décor at a casual glance appears quite similar, but in reality it deviates in various points. The *t'ao-t'ie* is bodied to the extent that some simple lines of a vertical body are still left above the hook which is the rudiment of the leg. In the *t'ao-t'ie* face the flange forms the central line, with no forehead shield at all. It has standing C-shaped horns. On the tall neck we have first, at the bottom, a zone with consecutive snakes (heads turned *en face*). Above this there are slender "rising blades"; in each of these the major part is filled with a *t'ao-t'ie*, to be seen from above (photograph held inverted). Above the two bulging eyes there are streaked eyebrows, and above these, again, some very drawn-out, C-shaped figures, forming the horns. Below the eyes are two C-shaped figures, which, in fact, are modifications of mouth lines. At the end of the blade, separated from the *t'ao-t'ie* by a narrow, empty band, there is a V-figure which is a corruption of a cicada drawing. In the space between the foot and the central part, there is a cross-shaped perforation. Except for this last our beaker is in almost every detail exactly similar to a beaker with a Yin inscription published in Huang, *Tsun ku chai*, II.45.


figure 31

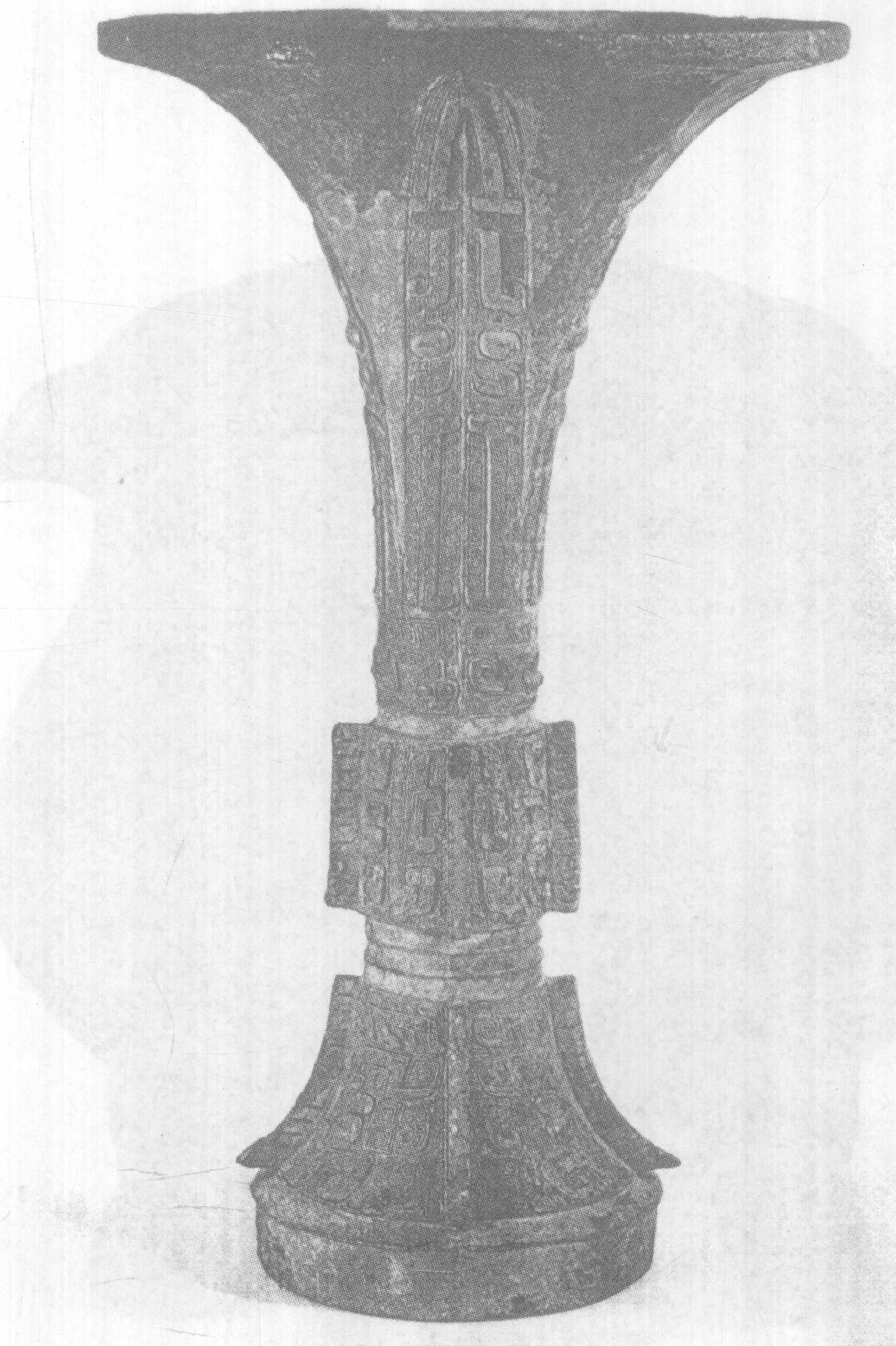
The inscription is shown in figure 31. The first character, unreadable, is probably a name: "X, being breveted, [has made this vessel] for Father Ting."

Yin or Early Chou. A style. HEIGHT: 11 3/4 inches. DIAMETER AT RIM: 6 5/8 inches. PATINA: grey-green and blue-green, with red patches. PUBLISHED: Waterbury, Plate 27.

NUMBER 25 PLATE 37

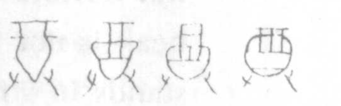


NUMBER 25 PLATE 38



NUMBER 26. *Stout wine beaker,* "TSUN." PLATE 39

Here again the term "Tsun" is a conventional name applied to a class of vessels by the Sung scholars and accepted by all later archaeologists. No inscription on a vessel of this class confirms it. Moreover, the early graphs for the word *tsun*, being pictograms (figure 32), show us quite a different type of vessel. Thus "Tsun" is most decidedly a misnomer, and when we still use this denomination, it is really a conventional lie.


figure 32

Our specimen here is characterized especially by its very thick and heavy flanges, which divide foot, bulb, and neck into panels. They narrow toward the vessel. The end of the topmost flange runs out into a bold projection far outside the rim of the vessel. The flanges have alternating straight and T-shaped scores, but the base (stem) of the T's is turned inward, not outward in the usual fashion (cf. our vessel 2), a most eccentric feature.

On a ground of squared spirals, the décor covers nearly the whole vessel. The *t'ao-t'ie* on the foot and the bulb are similar but not identical: the foot monster has a lower forehead shield, no eyebrows, and S-shaped horns, as against the recumbent C-shaped horns of the one on the bulb. The remnants of a vertical body and a leg are the same on both. On the neck there is, at the bottom, a belt with antithetical beaked dragons; above this are rising blades of a sturdy and broad variety. The blade is filled with a décor to be seen from above (photograph held inverted): flanking the flange, as a central line, there are two antithetical dragons, with strongly hooked beaks and standing C-shaped horns, their bodies going down (with a leg halfway and a tuft lower down) and meeting at the end of the blade. Together their heads form a *t'ao-t'ie* (observe the ears in the outer border of the blade). In the whole of the décor of this vessel the principal raised features, shaped as broad, flat bands, are quite smooth, having no filling (except a few scores on the horns of the bulb *t'ao-t'ie*).


figure 33

The inscription is shown in figure 33. This symbol is undecipherable (so Lo Chen-yü and other modern epigraphists), unless it is simply an abbreviation of the graph *lü* discussed under vessel 18.

Yin or Early Chou. A style. HEIGHT: 13 inches. PATINA: green with patches of red. PUBLISHED: Bull. Minn., 30:14; Karlgren, New Studies, Plate 20; Comstock, figure 2.

NUMBER 27. *Stout wine beaker*, "TSUN." PLATE 40

This vessel is of an exceedingly unusual shape, the whole being square until the approach to the rim, where it develops smoothly into a round shape. There is a complicated system of strong flanges. On the foot and the central part these flanges occur both at the corners and in the middle of the surfaces, thus dividing the latter into eight panels. Those on the central part have two toothlike projections at the top. The neck is divided into a lower and an upper part. The former is likewise cut up into eight panels, but on two surfaces not by flanges, but by free animals' heads; the upper half of the neck has flanges only at the corners, which project as long hooks outside the rim. All the flanges have the regular alternating straight and L-shaped scores.

The décor, on a ground of rounded spirals, very nearly covers the whole vessel. On the foot there is the hooked forehead shield of a *t'ao-t'ie*, flanked by winged dragons with small vertical crests and C-shaped, detached horns. On the central part there is a *t'ao-t'ie* forcefully drawn in bold, sweeping curves (observe that it cannot be cut up into two antithetical dragons, as is mostly the case). The hooked forehead shield coalesces with the recumbent C-shaped horns; the C-shaped (hooked-in) mouth line (cf., for instance, our vessels 1 and 12) is violently exaggerated, the hook continued into a spiral. At the side of each horn above the ear, a tiny vertical line is all that is left of the dragon body and forms the only feature recalling the fact that normally each half of the *t'ao-t'ie* should be a dragon. On the neck the lower part has the head (or the flange) flanked by the same winged dragons as those on the foot. Above this there are very broad, rising blades, with the flanges as their median line, so broad even far up as to leave only a scanty surface undecorated. The content of the upper blade section has to be seen from above (photograph held inverted). It is a violently stylized dragon, of which the curved beak, the crest, and the leaf-shaped horn are clearly visible, the body being a bold maze of curving lines. For the dragon origin of this figure cf. the similar but clearer variant on the broad blade of a "Tsun" in the University Museum, Philadelphia (Umehara, *Seikwa*, Vol. 1, Plate 27).

The inscription is shown in figure 34. This symbol has not so far been deciphered (see Jung, *Shang Chou*, 1:399). The same symbol recurs on two other vessels, a Kuang and a square Yi (both formerly in Mrs. Christian Holmes' collection and now in the Metropolitan Museum of Art), which form a set with our "Tsun" since their characteristics are exactly the same on almost every point and they were unearthed together with it (Jung Keng, *ibid.*). The set is depicted and discussed in BMFEA, Vol. 17, Plate 11; for the "Kuang" see also Umehara, *Seikwa*, Vol. 2, Plate 146, and for the Yi *ibid.*, Vol. 1, Plate 44.



figure 34

Yin or Early Chou. A style. HEIGHT: 8 15/16 inches. DIAMETER AT RIM: 8 3/16 inches. PATINA: grey-green. PUBLISHED: Umehara, *Seikwa*, Vol. 1, Plate 17; Bull. Minn., 26:33.

NUMBER 26 PLATE 39



NUMBER 28. *Stout-shouldered wine beaker*, "TSUN." PLATES 41 AND 42

This vessel is an unusually broad and thick-set specimen. The disposition of the vessel décor is highly sophisticated. Counting vertically, there are six zones or belts, the décor throughout standing against a ground of squared spirals. In the foot belt and that on the lower two thirds of the belly, six flanges (with alternating straight and L-shaped scores) divide the surfaces into six panels. The foot belt has a dragonized *t'ao-t'ie* with the S-shaped mouth line (for prototype see our vessel 9), not the C-shaped (for prototype see our vessel 11), and with S-shaped horns; on the back, before the tail rises in an S-curve, there is a long vertical quill. In the lower corner, under the raised tail, there is a vertical dragon (hardly visible in our photograph). On the lower belt of the belly we have exactly the same décor, but the vertical dragons behind the big ones are clearly visible here. The narrow belt on the upper part of the belly has only three flanges, which form the central lines of dragonized, winged *t'ao-t'ie*. The places of the skipped flanges (skipped with a view to the protruding heads on the shoulder above) are taken up by similar *t'ao-t'ie*, the décor in flat relief. All these dragonized *t'ao-t'ie* have T-shaped horns, as on our vessels 7 and 9.

The shoulder, again, has six panels, each filled with dragon figures drawn in exaggerated loops, their eyes protruding strongly, these panels being delimited alternately by flanges and by big, plastically executed rams' heads. On the neck there are no flanges. In the lower belt pairs of consecutive trunked dragons facing to the right confront pairs facing to the left. These dragons have bottle horns and quills on the back. Above, in the fairly slender rising blades, the décor filling, which must be seen from above, consists of antithetical dragons with standing C-shaped horns, their trunklike noses meeting in the median line, and their bodies (merely narrow bands), joining each other at the tip of the blade. Together they form a kind of *t'ao-t'ie*, but the whole blade with filling at the same time slightly suggests, and is probably meant to suggest, an eyed cicada.

The inscription (figure 35) depicts a wine vessel.



figure 35

Yin. B style. PROVENIENCE: An-yang. HEIGHT: 11 7/8 inches. WIDTH: 13 inches. PATINA: green with patches of blue. PUBLISHED: Bull. Minn., 30:14; Comstock, figure 3.

NUMBER 27 PLATE 40



NUMBER 28 PLATE 41



NUMBER 28 PLATE 42



NUMBER 29. *Stout wine beaker,* "TSUN." PLATES 43 AND 44

This type of vessel differs radically from such "Tsun" as form the principal "Tsun" class. The latter are all tripartite: foot, central part ("bulb"), and neck, well set-off against each other. The present vessel resembles more what is generally termed a "Chï": it differs from it only in having the mouth somewhat more flaring. This seems to be the criterion which induces the modern Chinese archaeologists to call it "Tsun" rather than "Chï." But, of course, the distinction is highly arbitrary, and all kinds of intermediate stages exist. Jung Keng has a so-called "Tsun" (*Shang Chou,* 2:286) and a so-called "Chï" (*ibid.,* p. 302) which are very nearly identical in shape. Thus our conventional terminology in cases like the present is really void of value.

The foot belt is divided into two halves by two tiny flanges, and the neck belt is correspondingly divided by two free animals' heads. For the rest, the division in panels is due entirely to the décor, which is in low, flat relief on a ground of rounded or pointed spirals. The foot belt is filled with long-drawn, antithetically placed, gaping dragons; the neck belt, with S-shaped, turning dragons, having big, C-shaped crests.

The principal décor, on the belly, is a pair of antithetical, tail-raising birds which have some interesting features. The crest is cleft in three strands, one slanting backward gracefully; the second, an enormous one, rising in a bold bow forward over the head and falling down before the feet of the bird; the third, a smaller, narrow one, curving down over the hooked beak. From the raised tail of the bird a big plume descends in C-shape all the way down to the feet. On the middle of the big crest as well as of the descending tail plume there are tufts such as we often find on dragons. The effect of the antithetically placed big crests on the one hand and of the antithetical tail plumes on the other is that of rudimentary *t'ao-t'ie* masks: the nose at the bottom, the hooked forehead shield, and the big horns in reclining C-shape. This rudimentary *t'ao-t'ie* thus appears in four places round the belly. Observe on the neck of the bird a scale of the type we generally find on snakes, owls, etc.; it probably has some magical significance.



figure 36

On the neck of the vessel, in the very broad rising blades, we again find antithetical birds in a different form: the crest leans forward, clublike, and a (detached) horn rises to the top of the blade. From the raised tail an additional plume with tufts likewise finds its way to the top. Between the birds there are two figures such as often represent rudiments of dragons (*t'ao-t'ie* bodies) (see our vessel 25, bulb, Plate 38). Observe also that the just mentioned detached horn of the bird has this same shape of a dragon rudiment.

The inscription (figure 36) reads: "The prince has made the precious vessel; may grandsons and sons forever use it." The ductus of the script is typical Early Chou.

Early Chou. HEIGHT: 9 5 8 inches. WIDTH: 8 7 8 inches. PATINA: blue-green. PUBLISHED: Bull. Minn., 37:14.

NUMBER 29 PLATE 43



NUMBER 29 PLATE 44



NUMBER 30. *Wine cup,* "CHI." PLATE 45

Here again it is very uncertain whether the term "Chï," applied to this class from the Sung catalogues down, is correct or not. No bronze inscription confirms it, and we have no means of knowing how the Chï figuring in the classical texts looked in reality. Our denomination "Chï" is therefore purely conventional. Moreover, our "Chï" here is nearly identical in shape (except for the slightly less flaring mouth) with the "Tsun" vessel (29) immediately preceding.

The domed lid achieves the softly undulating profile of this vessel in an admirable way. There are only very low, thin, and unsegmented flanges in the middle of the broad sides. The vessel is exuberantly decorated, the ground being spirals, mostly squared. In the foot belt and the neck belt there are dragonized *t'ao-t'ie* (winged), of the type which we have already found on vessels 7 and 11 above. There are strong affinities between those bronzes and our present cup in several other respects. The bodied *t'ao-t'ie* on the belly is here very kindred to that on those vessels, and also with that on the next, vessel 31. Observe, *inter alia,* the very tiny hooks on the forehead shield, as on vessel 7, and the scores on the horns, like those normally to be found on flanges (alternately straight and T-shaped), as on vessels 11 and 31. Flanking the *t'ao-t'ie,* behind its feet, are two head-turning dragons (not visible in our photograph), strongly stylized; they are very similar to, though not quite identical with, those on vessel 31 (see Plate 47). On the lid there are two mask *t'ao-t'ie* (scored horns, ear, eye, and mouth line visible in the photograph). On the upper part of the neck there are rising blades, filled with spirals which suggest dissolved cicada figures. The knob on the lid has approximately the same shape (rectangular cross section, sharp top line) as on vessel 24.

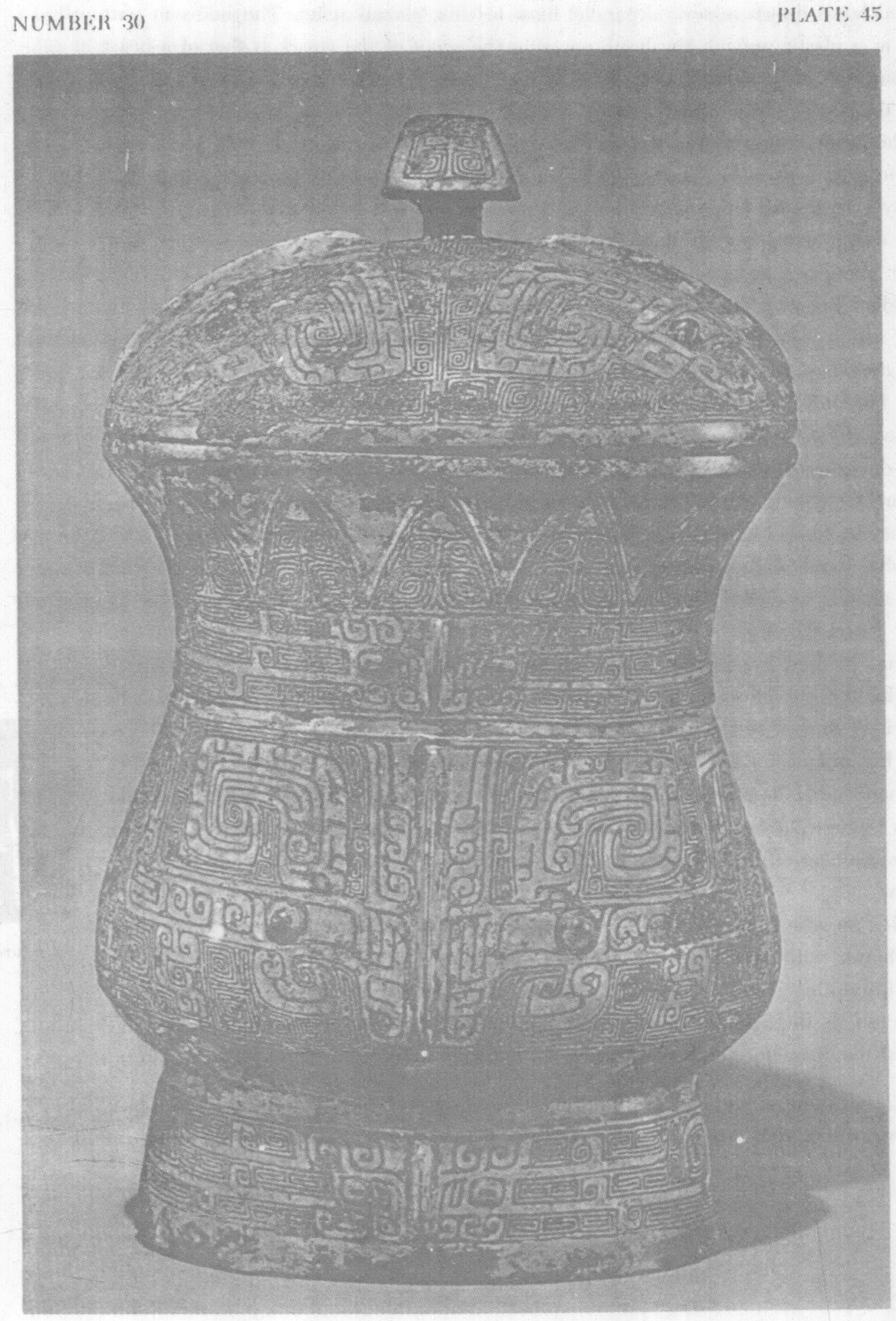
The inscription (figure 37) pictures two arrows in a stand. The meaning is unknown.



figure 37

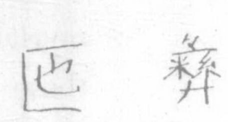
Yin or Early Chou. A style. HEIGHT: 8 1/4 inches. WIDTH: 4 7/8 inches. PATINA: grey-green and blue-green. PUBLISHED: Waterbury, Plate 12.

NUMBER 30 PLATE 45



NUMBER 31. *Ih.* PLATES 46 AND 47

As to the technical name of this vessel type, there is one thing that seems to be certain: the nowadays generally accepted name "Kuang" is a misnomer and really should be abolished. This term has not even the advantage of a long tradition, for it was only tentatively applied by one Sung writer (the author of the *Sü K'ao ku t'u*), whereas the more prominent and famous *Po ku t'u lu* records vessels of this type, together with such as our vessel 45 below (Plate 63), under the name of Ih. (We transcribe here figure 38A as Ih in order to have a spelling different from that of figure 38B, Yi, vessel 39—an arbitrary spelling distinction, used for practical reasons.) That the latter type is correctly called Ih is proved by inscriptions on such vessels, in which they are expressly called Ih. The authors of the *Po ku t'u lu* considered that the difference—our type here being taller and deeper and having a lid in animal shape—was only a variation due to period: the taller shape is typical of the Yin and Early Chou styles, whereas the lower, mostly lidless type (which is also larger) exists exclusively in the Middle Chou and Huai styles.



A B

figure 38

Wang Kuo-wei (*Kuan t'ang tsi lin,* III.12) objected to this: the two types should not be confounded; the low Ih of Middle Chou and Huai is a ewer, for pouring water, and is a profane vessel, used at feasts, as opposed to the taller vessel here, which was a sacrificial vessel (as shown by inscriptions). Thus the contrast is not merely one of style, but a fundamental difference in vessel type and function. For the low (late) class the term Ih is correct, as shown by the inscriptions. Consequently the tall (early) class should have another name; and here Wang accepts the term "Kuang" proposed by the Sung author of *Sü K'ao ku t'u.* For this he gives reasons not worth repeating here.

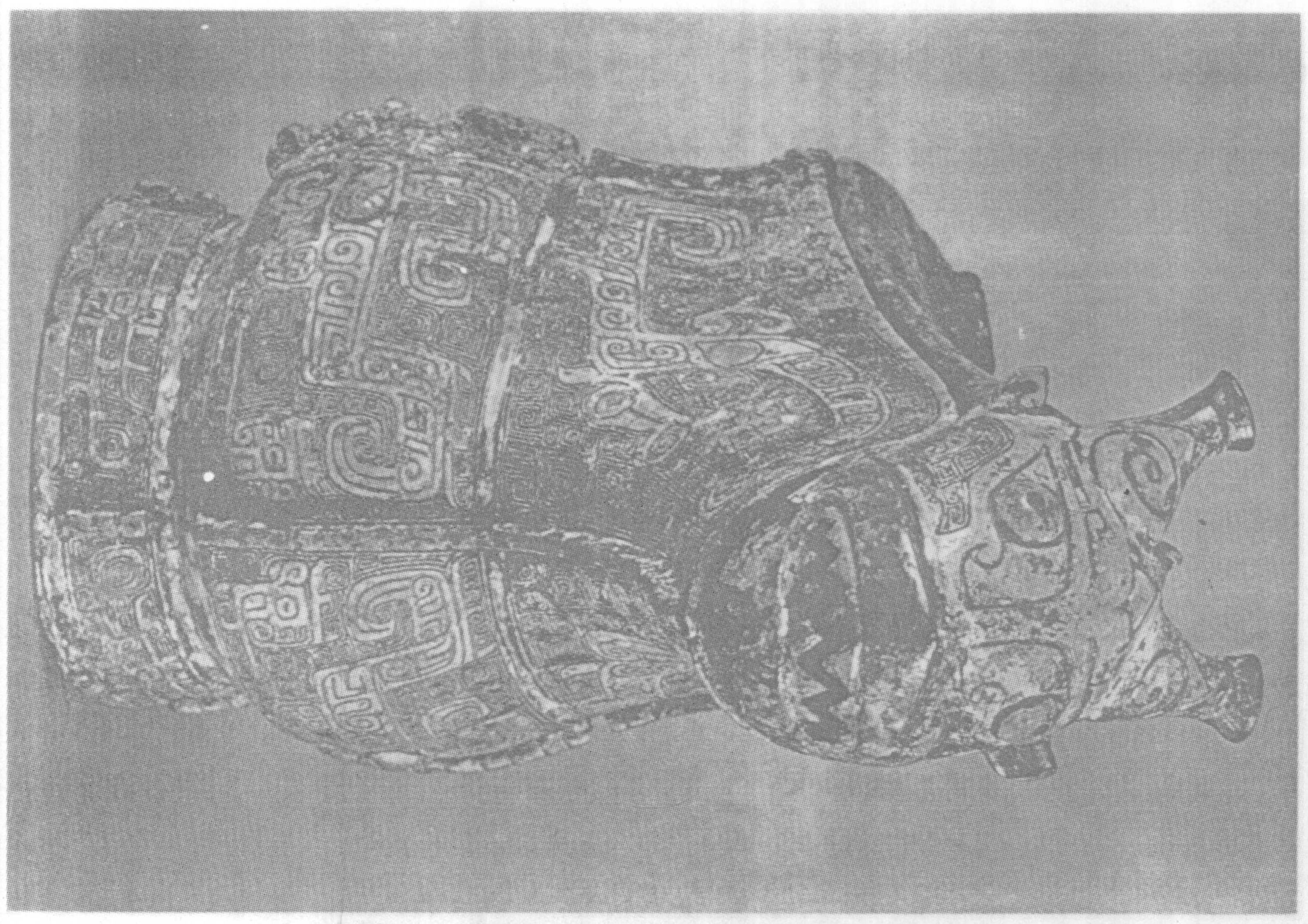
Wang's argument has two fundamental faults. In the first place, it is certain that the Kuang of the early classics, which is proved (by *Shi king,* Ode 154; see Karlgren, *The Book of Odes,* p. 99; by *Kuo yü,* section Yüe yü, part 2; by *Chou li,* chapter Lü sü; see E. Biot, *Le Tcheou li,* 1:259; etc.) to have been a drinking vessel, could not have been shaped as our type here, which is obviously not a drinking, but a pouring, vessel. In the second place, it is not at all sure that the inscribed bronze Ih of Middle Chou and Huai times was a profane vessel. We know from early texts that the word *Ih* (figure 38A) meant a "ewer" for pouring water when washing (e.g., *Tso chuan,* section Hi, 23d year; see Couvreur's edition, 1:348); but there is, of course, nothing whatever to prevent a bronze vessel of the same ("sauceboat") shape being used as a ritual vessel. Cf. *Shu, Ku ming:* "The Grand guardian received the vessel, descended, washed the hands, took another vessel . . . and made the matching libation"; here the hand-washing is one of the *tempi* in the sacrificial act. Thus the Ih vessel, both the smaller early type and the larger later type, may have served for pouring water over the fingers for purification purposes during the rite. They could likewise, both of them, have been used to contain spirits during a sacrifice: the fact that their shape is excellent for pouring (libation) and that they have sometimes been found with a ladle confirms that this was one of their functions. Our type of vessel here was, then, when in ritual use, called Ih, just like its profane counterpart. Similarly there were profane tripods in daily use called Ting (*Tso,*

NUMBER 31



PLATE 46

NUMBER 31



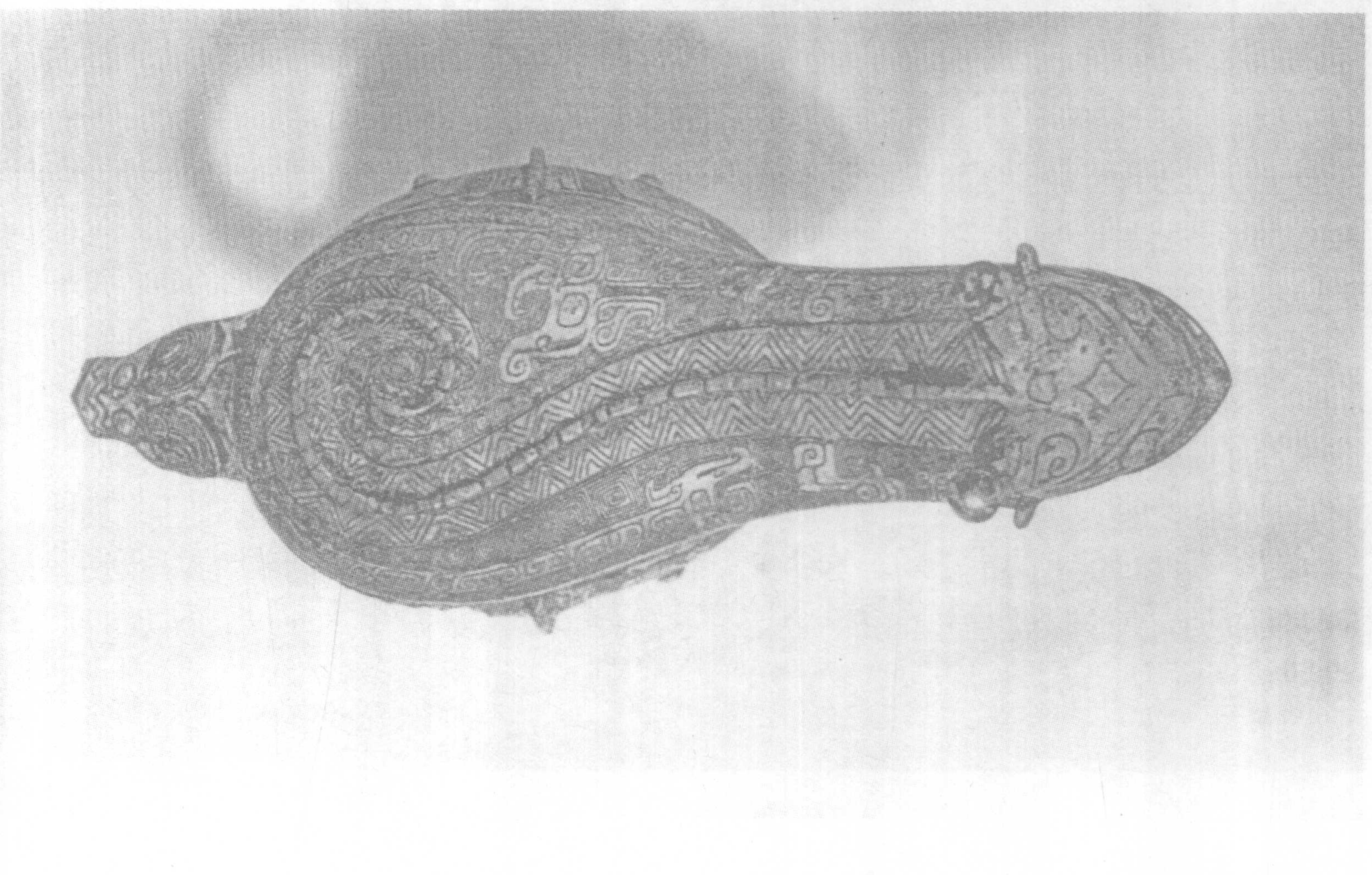


PLATE 47

Chao 5; see Couvreur's edition, 3:107), just as well as the sacrificial Ting; profane Kuei (*Shï king*, Ode 135; see Karlgren, *op. cit.*, p. 87), profane Hu (Mencius, section Liang Huei wang, part 2; see Couvreur, *Les Quatre Livres*, p. 144), etc.

The inscriptions favor this idea more than Wang's. There is a Middle Chou series of two Ting, seven Kuei, one P'an, and one Ih, all by a certain Shï Sung and evidently belonging together. The Ting and Kuei have a longer inscription, the P'an and Ih a shorter; but all have, at the end: *k'i wan nien . . . tsi tsi sun sun yung pao yung*—"May for a myriad years sons and grandsons forever treasure and use it." It is quite obvious that these vessels form a set, and it is exceedingly unlikely that whereas the Ting and Kuei were sacrificial vessels, the Ih should have been a profane washing utensil, with the same inscription formula as the ritual vessels. Again, when we find (*Kün ku lu kin wen*, II.iii.75) on a Middle Chou Ih an inscription like this—"In the 12th month, on the day yi-sï [the state] Cheng's Grand Scribe of the Interior, Shu Shang, made the Ih for Lady Shu Yün to bring along when married; may for a myriad years without end sons and grandsons forever treasure and use it"—we recognize the same formula which we find on scores of sacrificial vessels; cf., for instance, a Ting tripod (Lo Chen-yü, *Meng wei*, shang 11): "Ye Jen of Su made for Lady Ki of Kuo, [named] Yü-mu, the vessel to bring along when married; may sons and grandsons forever treasure and use it."

It would be foolish indeed to say that the former Ih was a profane washing utensil brought in the dowry, whereas the latter Ting was a sacrificial vessel—the only argument then being that we know that profane washing ewers were likewise called Ih. The slightest reflection leads us to recognize that the low Ih vessels of Middle Chou and Huai time were just as much ritual vessels as the Ting, Kuei, Hu, etc., with analogous inscriptions. The shape tells us immediately what they were—pouring vessels—and the role in the sacrifice is happily illustrated by the *Shu* passage quoted. When, therefore, we find a Middle Chou Ih with an inscription like this—"Lady Chung Ku, [called] Yi-mu, has made this *lü Ih*; may for a myriad years sons and grandsons forever treasure and use it" (*Po ku t'u lu*, xx.35)—it is quite reasonable and safe to translate *lü Ih* by "sacrificial Ih" (not "traveling Ih," as expounded under vessel 18 above).

But, then, since there is no longer the functional difference between the tall (earlier) type and the low (later) type propounded by Wang Kuo-wei, both being evidently ritual vessels, there is really no reason for attributing a special term to the former, which has just as much the obvious shape of a pouring vessel. It is an Ih, like the later specimens, and the difference is merely one of style, not one of function. That we have no inscribed specimens of the early type which expressly call it Ih is no obstacle, for among the few such specimens existing, only very few are inscribed, and those scantily; negative evidence here lacks all value. Therefore we have reverted to the nomenclature of the *Po ku t'u lu*. Indeed, in Lo, *San tai*, the term Ih is still applied to both types.

Our Ih here is a remarkable specimen in several respects, and of perfect workmanship. The body is divided into three horizontal belts, even the flanges being interrupted at the narrow, bare interstices. The flanges and the handle delimit four panels; the former

have alternating straight and L-shaped scores (in contrast to the flange on the lid). The plain handle has, at the top, an animal's head with zigzag lines across the nose and big, C-shaped horns drawn in several parallel lines in thin, thread relief. The lid is in part shaped as a plastic animal: the head, covering the spout of the vessel, is that of a beast which has some of the features of a *t'ao-t'ie*—the forehead lozenge and the bottle horns—but for the rest is more realistic: a fierce mouth with sawlike teeth, and well-modeled ears. This head is provided with a long-drawn dragon body reclining along the center of the lid; it is executed in low relief, but has a fairly high central flange (curving with the body in a big tail loop) with alternating straight and T-shaped scores.

The décor, which covers the vessel almost entirely, has, on a ground of squared or (rarely) rounded spirals, a *t'ao-t'ie* and various types of dragons. The bodied *t'ao-t'ie* in the middle belt is very reminiscent of that on vessel 30, but has S-shaped horns (with straight and T-shaped scores). Flanking this *t'ao-t'ie* there are strongly stylized, head-turning dragons (just as on vessel 30). In the foot belt there are dragons stylized in quite another fashion. They are essentially the same as on our vessel 21, and by comparison with the dragon commented upon under vessels 11 and 21 we can realize that the curving-down spiral in the center on our photograph is the beak of the dragon, the tail rising farthest behind the big eye. In the neck belt the consecutive dragons are not identical. The one to the right is an ordinary beaked dragon, with a recumbent C-shaped horn and small vertical crest, in principle a cleft crest (cf. the bird on vessel 2), but here with the two strands separated. The one to the left has no crest, a heart-shaped horn (cf. the bird on vessel 2), an eye which is not the simple circle of the other dragon, but the drawn-out, pointed eye of the *t'ao-t'ie* below, and an enormous beak drawn out so as to parallel the curvature of the rim. Inside the curve of the beak there is again a small, head-turning dragon similar to those in the middle belt.

The big dragon on the lid has spirals on the base of the horns, a single scale between them, and, along the central flange, parallel zigzag lines which together form the common lozenge pattern. A short distance behind the horns there are legs in flat relief of the type common on bodied *t'ao-t'ie*. The big dragon is flanked by smaller ones, in flat relief, the tails of which meet at the end of the lid: the one an ordinary gaping dragon, with rolled-up nose (and a T-score on the nose) and C-shaped horn, the other quite similar but shorter, with larger head, this latter turned round.

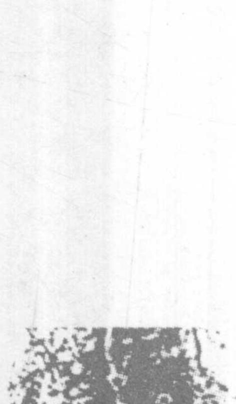


figure 39

The inscription (figure 39) has the same symbol *lü*, "sacrificial (vessel)," discussed under vessel 18, the figure at the top being an adornment on the banner staff, a common variant of the character (cf. *Siao kiao king ko kin wen*, IV.16).

Yin or Early Chou. A style. HEIGHT: 7 inches. LENGTH: 9 1 2 inches. PATINA: light blue-green. PUBLISHED: Bull. Minn., 31:10; Comstock, figure 5.

NUMBER 32. *Kuei.* PLATE 48

That this is the vessel type called Kuei in the early literature is well established. This low, broad, and burly vessel has a proportionately very high foot, with space for a broad décor belt. The surfaces are divided into four vertical panels by four flanges on the foot, two flanges and two handles on the body. The very thin, shallow flanges contrast curiously with the stout, heavy handles with their broad and massive bovine heads at the top. The principal figures in the décor, executed in low relief (except the eyes, which are strongly protruding) are so overloaded with adorning lines that they do not contrast very strongly against the ground of squared spirals.

In the foot belt two of the flanges form the central lines in rudimentary *t'ao-t'ie* masks (nose and hooked forehead shield). Each panel here has two consecutive head-turning dragons with C-shaped horns, rolled-up nose, and, in the middle of the back, one single, vertically raised quill. The mask *t'ao-t'ie* on the belly has the ordinary features, strongly detached from each other; the recumbent C-figure below the eye is the drawn-up mouth line. The *t'ao-t'ie* is flanked by vertical dragons. Whereas the flanges form the centers of two such *t'ao-t'ie*, the handles are in the middle of two more, and here the center of the face (the nose and the hooked forehead shield) has been cleft, leaving an interstice between the halves as broad as the handles. The surface of this interstice (under the handle) is decorated in flat relief with a bovine *t'ao-t'ie* (thus a small *t'ao-t'ie* inside the bigger one). The neck band again has dragons, here with strongly oversized beaks, reminiscent of the one on vessel 31.



figure 40

The inscription (figure 40) is *Shï*, "Scribe."

Yin or Early Chou. A style. HEIGHT: 5 3/8 inches. WIDTH: 11 7/8 inches. PATINA: blackish. PUBLISHED: Bull. Minn., 28:22; Comstock, figure 4.

NUMBER 32



PLATE 48

NUMBER 33. *Kuei.* PLATE 49

On this vessel the division into four vertical panels is effected in two places by the handles only (no flanges), and in two places by small flanges in the foot belt, a slight ridge in the central belt, and free animals' heads in the neck belt. The flange forms the center of a rudimentary *t'ao-t'ie* mask, the ridge the center of a bodied *t'ao-t'ie*. The latter is well contained, and the elements are the usual ones (the C-curved mouth line, the hooked forehead shield, the raised and spiral-ending tail, the leg with clawed foot, the recumbent C-horns); but the style is more playfully elegant, with drawn-out corner points and various tufts, as compared, for instance, with the similarly constructed *t'ao-t'ie* on vessels 7 and 34. The winged dragons in the foot belt and the birds in the neck belt are all, like the *t'ao-t'ie* in the center, in fairly high, rounded relief on a bare ground.

The handle has on the top a ramlike animal's head, but the bow of the handle is adorned with birds' wings in flat relief (in narrow parallel bands) so that the ram's head obtains a bird's body; the long bird's tail goes down vertically (in the same flat, band relief on the rectangular lower projection) turning the end up forward (outward), and the bird's leg and foot come down in front so as very nearly to rest upon the curled-up tail. This arrangement is exactly the same as that which we found in plastic execution on our vessel 4, Plate 4. It is common in the Kuei class, and this is, in fact, the explanation of the numerous specimens which, below the bow of the handle, have simply a C-shaped hook (see, for instance, our vessels 34 and 36): this hook is really a remainder of the same "bird" representation, being the turned-up tail of the bird.

Yin or Early Chou. A style. HEIGHT: 11 1/4 inches. DIAMETER: 13 1/8 inches. PATINA: pale green.

NUMBER 33



PLATE 49

NUMBER 34. *Kuei.* PLATES 50 AND 51, UPPER HALF

The disposition of this vessel, its bare ground, its system of flanges and free animals' heads and *t'ao-t'ie* in the central field are the same as in the preceding vessel. The beaked dragons in the neck and foot belts have an unusual feature in the additional plume which hangs down from the curled-up tail. On the handles there are rams' heads, and the C-hook at the bottom is a reminiscence of a curled-up bird's tail (see vessel 35 below). The most interesting feature is the décor, in threadlike relief, on the bottom surface (Plate 51). It is a coiled dragon, with a rolled-up nose and a body adorned with a row of big scales. A foot with claws and fetlock is seen on the inside curve; the outer edge of the coiled body is furnished with tufts which in pairs form C-figures (figure 41, in which we have left out the embellishments). The space behind the tail has been filled out with a simple figure, which is really a rudiment of a dragon body (cf. our vessel 25, central part, Plate 38).



figure 41

Yin or Early Chou. A style. HEIGHT: 6 7/8 inches. DIAMETER: 12 1/4 inches. PATINA: grey-green.

NUMBER 34



PLATE 50

NUMBERS 34 AND 35

PLATE 51





NUMBER 35. *Kuei.* PLATES 52 AND 51, LOWER HALF

This vessel, with its high square podium, offers several very interesting features. In contrast to the preceding two vessels (from which it differs also by its décor ground of rounded spirals and by its "uni-décor," i.e., lack of a special neck belt), the division into four vertical panels on the vessel proper has been effected, in the foot belt, by four flanges; on the belly, by two flanges and the two handles. The flanges are thick and heavy, and the T-scores have broken through so as to make the remainder look like big hooks—a typical Early Chou feature. The belly flanges form the center lines of bodied *t'ao-t'ie* of the regular kind (same type as vessel 34); the flanges in the foot belt below those on the belly are the median lines of rudimentary *t'ao-t'ie* masks (nose and forehead shield). This mask is flanked by two trunked dragons of the winged variety. The trunked dragons mostly occur combined so as to form a *t'ao-t'ie* (the trunk ends forming the nose of the *t'ao-t'ie*; see, for instance, Plate 14), but here they have been drawn far apart, and their independence is emphasized by the *t'ao-t'ie* shield in the middle. On the podium there is the same *t'ao-t'ie* as on the belly, but here with only a very slight ridge for the central line.

The most remarkable feature of this bronze is the handle. On its bow there are the wings of a bird in relief, and in the rectangular bottom projection there are a bird's tail curved-up forward and a bird's feet above the curled-up tail, exactly as on vessel 33. But the head of this bird's body is an elephant's head with big ears in pointed C-shape, raised trunk, and protruding tusks.

The inscription (figure 42) reads: "Ch'u-shu X has created and made the vessel, wherewith to feast the Guests [i.e., Spirits]." *Pin,* "guest," was a technical term for the Spirits of dead ancestors when they came to enjoy a sacrifice; see BMFEA, 20:139.



figure 42

Early Chou. A style. HEIGHT: 10 7/16 inches. WIDTH: 13 3/4 inches. PATINA: green. PUBLISHED: Bull. Minn., 26:33.

NUMBER 36. *Kuei.* PLATE 53

This unique specimen is worked with an admirable technical perfection that testifies to the fact that the artisans of Early Chou sometimes fully equaled their Yin-time predecessors in taste and skill. It is a fallacy to believe that a bronze of high artistic perfection *eo ipso* is more likely to be Yin than Chou.

The usual division into four fields is suggested exclusively by the free animals' heads which in the neck region alternate with the handles. The décor consists of a ground of spirals, in part rounded and in part sharply acute-angled. On this, in the foot belt, is an eyed band with diagonals; on the belly are antithetical tail-raising birds, all in flat relief. These extraordinary birds have a very close parallel on a "Yu" in the Sumitomo collection (*Senoku*, Vol. 2, Plate 67) and on a "Tsun" in the Imperial collection (*Illustrated Catalogue of Chinese Government Exhibits for the International Exhibition of Chinese Art in London*, 1936, Flate 76), but are, for the rest, unique.

The crest of the bird splits up in three strands, the middle one a short, spearlike point, the other two forming long plumes, one falling straight down past the turned head and in front of the breast, the other first going forward past (and parallel with) the beak, then rising in a bold sweep above the head and coming down, in two parts, behind the first strand. Thus three parallel bands descend, the outer two adorned with rounded figures reminiscent of those of a peacock, but having, in fact, a special meaning: the hollowed-out, or sunken, center has the shape of a scale, and it recurs on the neck of the bird (just below the eye), in exactly the orthodox place for such a single scale on a bird (cf. our vessel 29, a strongly affined type, and of the same provenience). There is undoubtedly some fecundity magic connected with this scale, since it is at the same time cowrie-shaped. From the raised tail three bands descend (poorly visible in our photograph) in a fashion exactly similar to those just discussed. The animal's head on the handle has large, sidewise-protruding tusks. For the hook on the bottom projection of the handle, cf. what was said under vessel 33.

The inscription (figure 43) was first published by Lo Chen-yü in *Cheng sung t'ang tsi ku yi wen*, pu shang 26, with a decipherment, and then with a good rubbing, in *San tai*, VIII.50. Lo leaves six characters unidentified, simply copying their ancient forms. Of these, however, the sixth character in the first line (*ch'u*, "go out"), the fourth character in the second line (*liao*, a "burnt-offering"), and the second character in the third line (*kuo*, "city wall," here a name) are safely identified. In the first line, the fourth graph is probably *tsi*, "a footprint" (in its ancient form consisting of *ts'ï*, "thorn," and radical 162, "to walk"), and the fifth may possibly be *yü*, "fish." This leaves only the fourth character in the third line (consisting of *yai*, "river bank" and "hand") still unidentified; it is here a personal name.



figure 43

NUMBER 35 PLATE 52



The meaning of the inscription is: "The King attacked Tsi-yü and went out and attacked Nao-hei. When he came [back], he made *liao*-sacrifice [burnt-offering] in Tsung Chou and presented to [me], Kuo Po X, cowries, ten double strings. [I] presume in response to extol the King's grace, and so I have made my accomplished dead father's precious Kuei vessel. May for a myriad years sons and grandsons forever treasure and use it."

Early Chou. PROVENIENCE: Si-an (Ch'ang-an) in Shensi. HEIGHT: 6 1/4 inches. WIDTH: 12 inches. PATINA: pale green with patches of blue-green. PUBLISHED: Bull. Minn., 37:14.

NUMBER 36

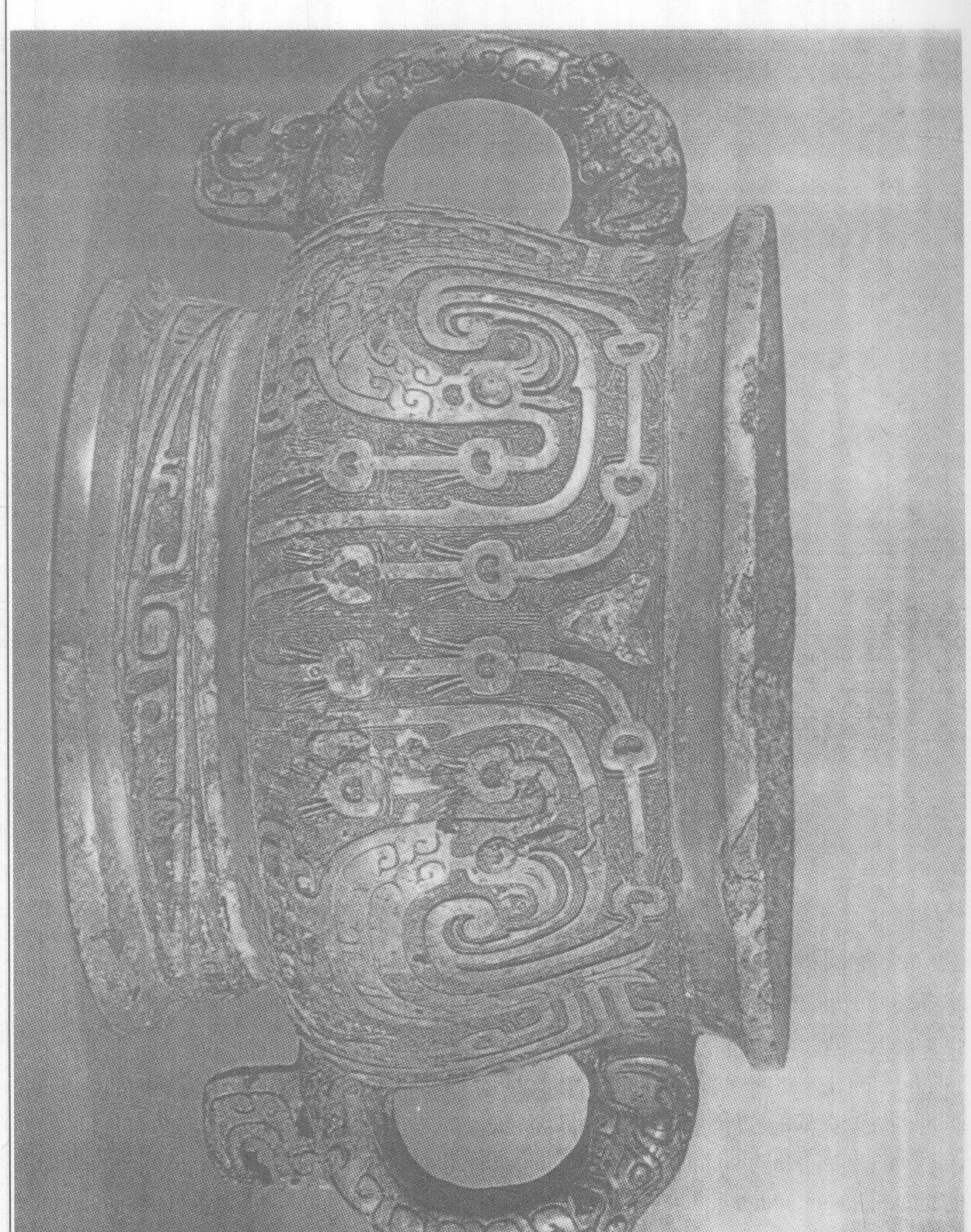


PLATE 53

NUMBER 37. *Kuei* WITHOUT HANDLES. PLATE 54

The stout flanges, which divide the vessel into four vertical panels (in the neck belt replaced by free animals' heads in two places), have the regular scores, alternately straight and T-shaped. The bodied *t'ao-t'ie* has the regular features studied on our vessels 7, 11, 30, and 34, yet differing from those by the S-shaped instead of a C-shaped mouth line, showing the teeth and in this respect resembling those on vessels 9 and 14, on which the teeth are likewise visible. Similarly, the dragons in the foot belt have the mouth shaped like that of an ordinary "gaping dragon," though the head turns downward, and thus differ slightly from the ordinary "trunked dragon" (e.g., on vessel 34), whose lower jaw, drawn far back, turns inward in a C-bend, not outward as here. (We had, however, trunked dragons with the lower jaw turning outward on vessel 28, the neck belt.)



figure 44

The inscription is shown in figure 44. The frame is the so-called *ya* figure, discussed under vessel 4 above, which probably has to be read *ts'ung* and means "ancestral-temple implement." Inside it there are various characters: Right line: *jo*, "agree, as if"; *kuei*, cyclical character; *tuei* (*shi*?) *Yi*, which appears to be a name; Left line: *shou*, "to receive"; *lü*, "group, collective sacrifice" (see under vessel 18); *chi*, "foot," and *yi*, cyclical character. It is, of course, entirely futile to try a connected reading of this, as is also recognized by many modern Chinese epigraphists (Lo Chen-yü and others). Attempts have been made to explain the *ya* (*ts'ung*) figure as a clan name and some characters inside it or below it in various inscriptions as subclan names or state names, and this may be tempting. But as far as can be seen at present, the only argument in favor of these interpretations is our own fervent wish to be able to say at least something about these early inscriptions; there is no real support in early texts.

Yin. A style. HEIGHT: 7 inches. DIAMETER: 9 7/8 inches. PATINA: grey-green.

NUMBER 37



PLATE 54

NUMBER 38. *P'an.* PLATE 55

That this is the proper name for this type of vessel is confirmed by inscriptions.

The P'an of Yin time are as a rule without handles; those in Early Chou mostly, but not always, have handles. On our vessel here the division of the two décor belts is achieved, in the upper by a free animal's head, an unusually realistic bovine head, in the lower by a tiny flange. The bird in the foot belt is of the regular type, yet with one curious variation. The long tail is, as usual, cleft in one shorter part, descending, and one longer, which goes up in a long loop (cf. the typical case on our vessel 2); but the shorter one is here modified so as to resemble the leg of the bird, giving a curious impression that the animal has one front and one hind leg. (The tuft in the middle, where the tail goes out from the body, is a common feature; see vessel 33.) The winged dragon in the upper belt has a tiny vertical crest and a big bottle horn (cf. the bird on our vessel 24), but with fingerleaf top and an eye in the center of this leaf. This feature is exactly the same as on our vessel 14 (Plate 19), though there in a plastic form. The dragon has one vertically raised quill on the back, and from the rolled-up tail an extra plume hangs down, similar to that on vessel 34. Observe, finally, the clever variation in the size of the ground spirals.

Yin or Early Chou. HEIGHT: 4 1/2 inches. DIAMETER: 13 1/4 inches. PATINA: grey-green in neck and foot belts.

NUMBER 38



PLATE 55

NUMBER 39. *Casket-shaped vessel,* SO-CALLED "FANG YI." PLATES 56 AND 57

The term "Fang Yi" is here a makeshift denomination, meaning simply "square vessel," and it does not mean that we can identify this type of vessel with any particular class the use of which is revealed in the classics.

This vessel, of a rectangular cross section, is divided into eight vertical panels by stout flanges which have alternating straight and T-shaped scores. Observe the curious feature that on the narrower sides the central flange does not continue to the top ridge of the lid, but ends abruptly with the *t'ao-t'ie* mask of which it forms the median line. A foot belt, a principal surface, and a neck belt are set off very unobtrusively by shallow and narrow flutes, without any corresponding interruption in the flanges. The foot belt, however, corresponds to a real foot part, the bottom of the vessel being on a level with the lower flute. The semicircular openings in the center of the sides of the foot are possibly vents for the fumes of burning charcoal(?).

The whole vessel is covered with décor, the ground being squared spirals. In the foot belt there are antithetical elephants, the hindquarters adorned with whorl circles. On the principal surface, the *t'ao-t'ie* has the common C-shaped mouth line, forehead shield with rounded top, and C-horns with a border carrying straight and T-shaped scores (like the flanges). The *t'ao-t'ie* is flanked on the broader sides (but not on the narrower) by vertical dragons in relief so low and bands so narrow that they almost escape the attention of the observer. In the neck band there are trunked dragons with heart-shaped horns (cf. vessel 31, Plate 46, dragon in neck belt) and a row of scales on the body. Along the back the dragon has a flange-like border with straight and T-shaped scores. Observe the curious variation that whereas the dragons on the broad side have the lower jaw turning outward (backward, as on vessel 37, foot belt), those on the narrow sides have it turning inward (forward, as an ordinary "trunked dragon," vessel 35). The lid has the same *t'ao-t'ie* as the principal surface, yet inverted, so as to be seen from above. The shape of the knob is the same as on vessel 30, the "Chi." It is undecorated, which is somewhat surprising on this profusely decorated vessel. On the inside of the lid is a cicada. A strange feature of the vessel is that the spiral patterns of the ground do not balance in the two halves of a surface.

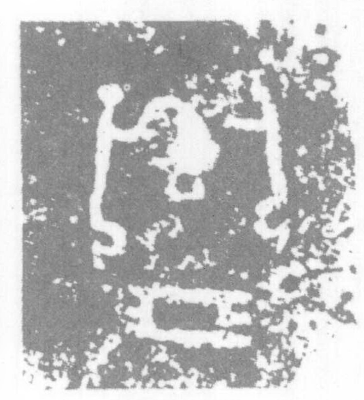
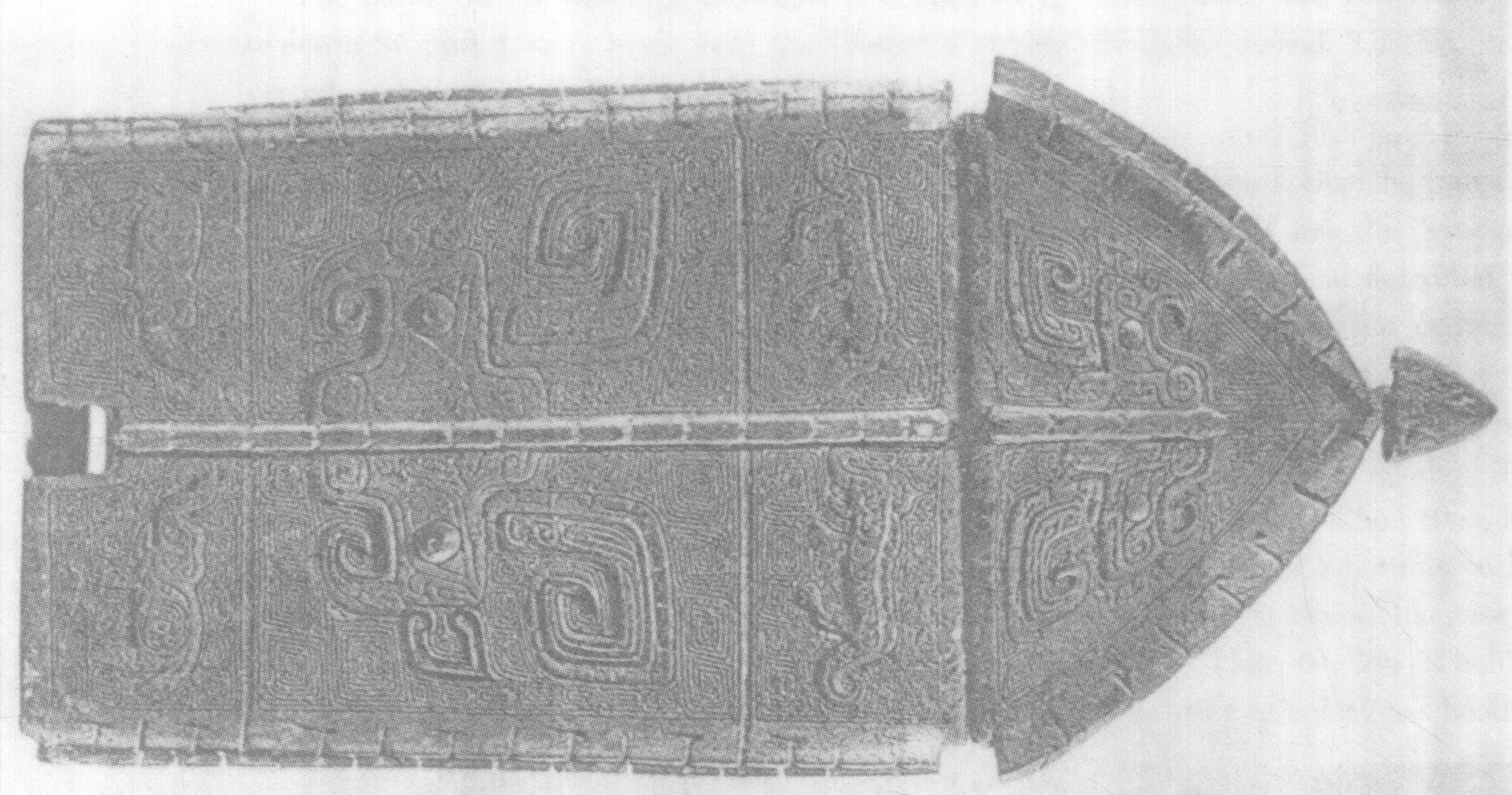


figure 45

The inscription, which is shown in figure 45, is common, occurring, for instance, on a Kia in the Freer Gallery (Freer Cat., p. 23) and on a Kuei in the collection of the Crown Prince of Sweden (Cat., p. 137). The upper part is *hiang*, "sacrificial feast," the lower part a symbol, which frequently occurs, denoting a receptacle (e.g., for keeping a dagger-axe).

Yin or Early Chou. A style. HEIGHT: 11 3/4 inches. WIDTH: 7 1/4 inches. PATINA: grey-green. PUBLISHED: Bull. Minn., 26:33; Waterbury, Plate 11; Comstock, figure 1; first published in Huang, *Tsun ku chai*, 1.43 (there without inscription); repeated in Jung, *Shang Chou*, 2:598.







NUMBER 40. *Lei.* PLATE 58

That this is the correct term for this type of vessel is confirmed by inscriptions. It was used for containing wine and sometimes water. It is a vessel class in which a typical pottery shape has been translated into bronze. We have pottery Lei vessels brought to light in An-yang: on the one hand, of coarse material (e.g., *Preliminary Report on Excavations at An-yang*, Vol. 1, Li Chi, Plate 6); on the other hand, exquisite specimens of the famous white pottery of An-yang (e.g., a Lei in the Freer Gallery of Art [Waterbury, Plate 26]).

The animals' heads on top of the handles, in our photograph only seen in profile, are exactly like the one seen *en face* on the lower part of the belly. The ring in the handle is adorned with an eyed band with diagonals (not visible in the reproduction). The décor, on a ground of spirals that are squared (except for a single border of rounded ones topmost on the belly), is disposed in four parts. Furthest down there is a row of very large hanging blades, the borders of which are scored (with straight and T-shaped scores), like flanges, and which contain two antithetical figures in flat, band relief. These are really extreme corruptions of beaked dragons with bodies coalescing at the point of the blade. For this origin, cf. vessel 26 (Plate 39, blade seen from above) and, still more evident, a Chicago Lei (Chicago Cat., Plate 10); this latter has a realistic cicada in the middle of the lower part, on our vessel here simplified into a plain triangle. In the neck belt and the belt on the lid there are alternating whorl circles and birds with cleft crests and heart-shaped horns. On the shoulder is a belt with strongly stylized dragons. These latter are best seen in the rubbing, figure 46. They show the interesting feature that the same dragon head serves for two differently shaped dragon bodies (a winged dragon on the one side, a dragon with curled-up tail and an extra plume on the tail end on the

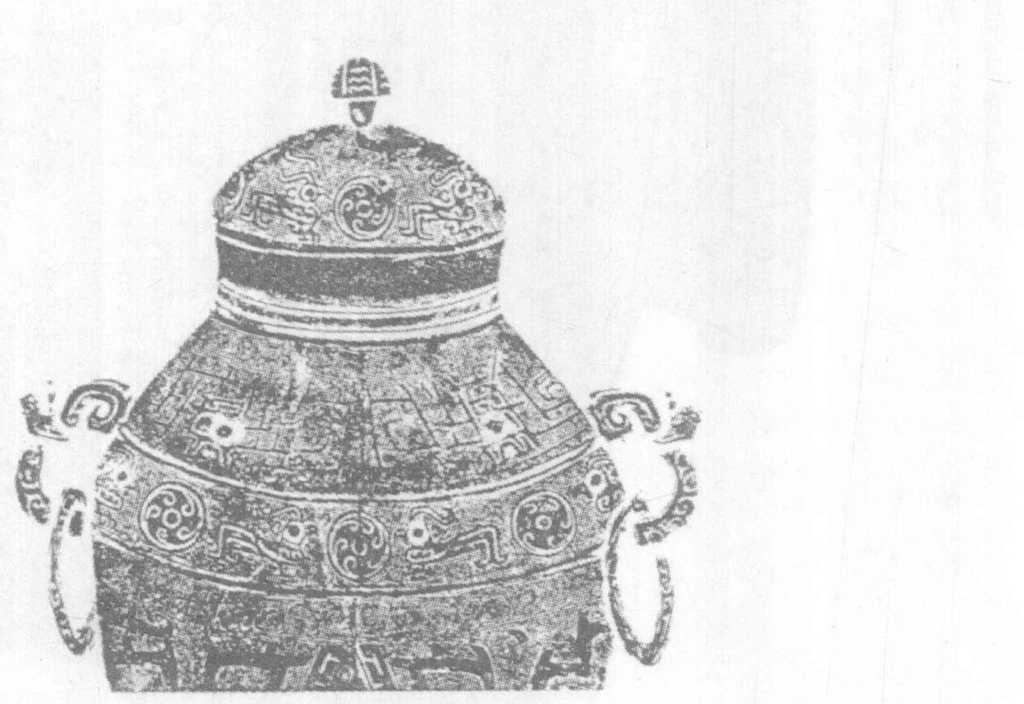


figure 46

NUMBER 40 PLATE 58



other). A very similar double-bodied dragon décor occurs on a shouldered Tsun in *Senoku*, Vol. 1, Plate 29.

The inscription is shown in figure 47. This symbol is common on Yin vessels. The frame is the so-called *ya* figure (*ts'ung*) discussed under vessel 4 above, inside it a scene which obviously depicts a sacrifice.



figure 47

Yin. B style. HEIGHT: 14 1/5 inches. WIDTH: 11 1/4 inches. PATINA: silvery green. PUBLISHED: Waterbury, Plate 38; earliest published in Sun, *Cheng ts'iu*, p. 29, then being in the collection of Ch'en Ch'eng-k'iu (Tsi-liang) of Min-hien.

NUMBER 41. *Wine vessel* IN OWL SHAPE. PLATE 59

The bird has one front and one back flange, with alternating straight and L-shaped scores, the former ending just under the beak, the latter continuing to the top of the head. The tail forms the back support for the vessel. The feet are very realistically formed, whereas the rest is strongly stylized. The whole bird is covered with rows of scales, the only exception being that the shoulder line (expressed by a vigorous spiral) and the wing quills are designed by bands filled with antithetical spirals.

Yin or Early Chou. HEIGHT: 12 1/2 inches. WIDTH: 8 1/4 inches. PATINA: soft green.

NUMBER 41 PLATE 59



NUMBER 42. *Ho.* PLATE 60

The term Ho for this kind of vessel is correct, as proved by inscriptions. The Ho vessels vary in shape according to the shape of the belly, which may be formed like that of a Li, a Li-ting, or a Ting. Our present Ho—a unique specimen—has the semispherical shape of a Ting. The side handle, surmounted by an animal's head; the chain and its rings; the small lid handle, decorated with dragon heads (facing downward); and the spout are all very simple. In the décor the blades on legs and spout and a dragon motif in the neck belt and lid belt—so dissolved as to leave only the eyes and interlocked double-spirals as remnants of the bodies—show nothing uncommon. So much the more remarkable is the covering of the belly: rows of scales in a flat, double-band relief, the encircled space of each scale being filled with a motif of dissolved cicadas in thread relief. This scale covering gives an intimation of the scale-band motif of the Middle Chou style, and probably our vessel, which has the cylinder legs of the earlier epochs, has to be dated in the latter part of the Early Chou period, on the border to Middle Chou, i.e., around 900 B.C.

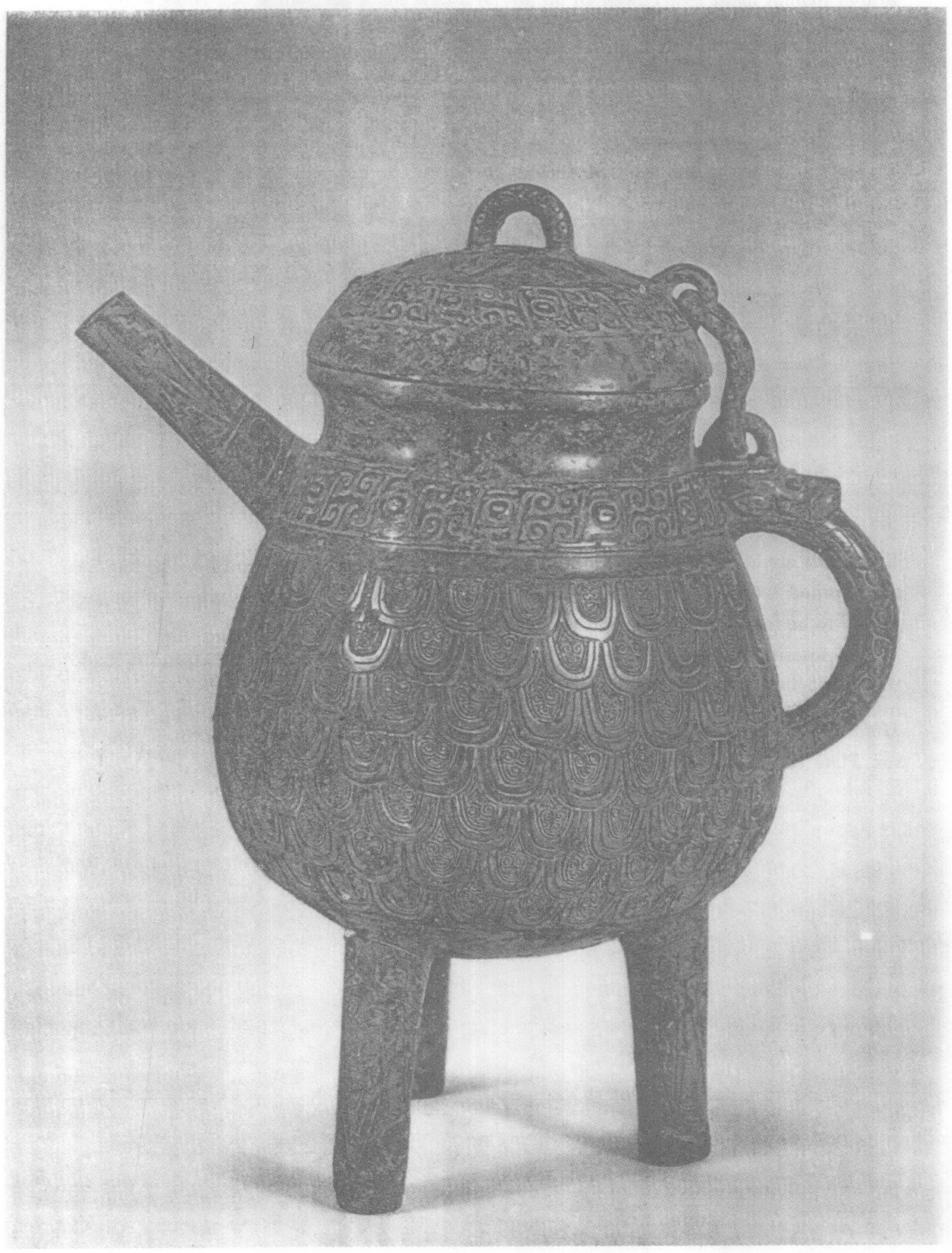


figure 48

The inscription (figure 48) reads, "Scribe; [to] Father Yi."

Declining Early Chou. HEIGHT: 11 5/8 inches. WIDTH: 9 3/4 inches. PATINA: grey and blue-green.

NUMBER 42 PLATE 60



NUMBER 43. *Sü,* ONE OF A PAIR. PLATES 61 AND 64, LOWER HALF

The name Sü for this type of vessel is confirmed by inscriptions, the difference between a Sü and a Kuei being that the former is oblong, the latter round. The lid, if inverted, will be a vessel (tray) by itself.

This beautiful vessel, which has a quality of workmanship unusually fine for the period, exhibits some of the most typical features of the Middle Chou style. The foot belt has the so-called "wavy line," here executed in openwork; the belly has the "grooves" (gadrooned rings); and the neck belt and lid belt have the "scale band" in flat relief. In these last belts there is a tiny flange in the center of the long side, dividing it into two halves, following up the Yin tradition of dividing a vessel into four panels by handles and flanges (or free animals' heads). The handles are the "bent ears" so common in Chou time, but rare (though occasionally occurring) in Yin time. Inside the ring on the lid there is a bottom décor, likewise in flat relief (double-banded); see Plate 64, lower half, a big, S-shaped dragon's body, ending in a dragon's head at each end (figure 49). Observe the long tongue (which hangs down across the neck), the ear, and the crooked horn. On the S-band of the body there is, in the middle of either half, a tuft; but just below the tuft an eye in high relief has been added, and a slanting cross-slit in the relief band, which all goes to create the impression of a beaked head.

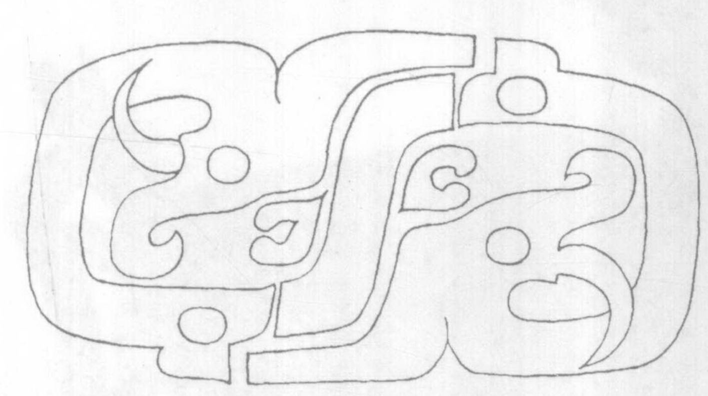


figure 49

The inscription (figure 50) reads: "Po Sien has made the sacrificial Kuei vessel; may one forever treasure and use it." The vessel is here called a Kuei, the Sü being, as stated above, only the elongated variety of the Kuei.



figure 50

Middle Chou. HEIGHT: 7 1/2 inches. LENGTH: 12 1/2 inches. PATINA: green with patches of blue. PUBLISHED: Bull. Minn., 28:22; Davidson, Plate 10; Comstock, figure 12.

NUMBER 43



PLATE 61

NUMBER 44 PLATE 62



NUMBER 44. *Hu.* PLATE 62

The profile of this Hu flask comes very near to that of our vessel 19, of an earlier epoch; but for the rest the contrast is strong. The ring-shaped top of the lid can serve as foot, if the lid, inverted, is turned into a cup. In the narrowest part of the neck there are placed two tiny handles, and a division into four sections is achieved through the addition of two free animals' heads. The décor is, on the foot, an eyed band with diagonals, on the belly a cross-system of bands in flat relief, imitating straps round the flask. At the meeting points of these bands there are big lozenges, in high, peaked relief.

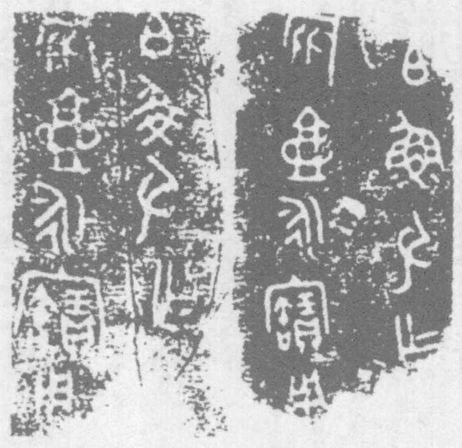


figure 51

The bands are scale bands, and identical scales fill the bands on neck and lid. The handles are adorned with *t'ao-t'ie* heads (in the Middle Chou style rare and, when occurring, mostly to be found on accessory parts like handles or legs).

The inscription (figure 51, vessel to the left, lid to the right) reads: "Po Yü-fu has made the sacrificial Hu; may one forever treasure and use it."

Middle Chou. HEIGHT: 14 inches. PATINA: green with patches of red. PUBLISHED: Davidson, Plate 10.

NUMBER 45 PLATE 63



NUMBER 45. *Ih.* PLATES 63 AND 64, UPPER HALF

For a discussion of this vessel type and its use, see under vessel 31.

The bowl is here decorated in flat, band relief, with two bands with vertical scales and, at the top, one broad figured band having S-figures with big tufts at either end, probably remnants of strongly deformed dragons. At the end of the spout this row terminates in a dragon head with rolled-up nose. The scale band stops before reaching this point, and two large scales are placed crosswise, filling out this terminal space. The legs are interesting in that the front leg has a dragon's head (of quite the same shape as that in the neck belt), whereas the hind leg is adorned with a big spiral such as usually emphasizes the hindquarters of an animal. Thus the two legs have to be taken together as a whole: the front and hind part of one animal. This arrangement is not unique (other examples are Eumorfopoulos Cat., Vol. 1, Plate 45, and the Ih of the famous Shï Sung set; see BMFEA, Vol. 8, Plate 45), but mostly there are identical animals' heads placed either consecutively or antithetically on both legs. The rather stiff legs end in feet coarsely drawn like two meeting, comma-shaped claws. The handle has, on top, an animal's head (see Plate 64) with the broad, rolled-up nose which later became so ubiquitous in the Huai style, and big horns shaped as two back-to-back birds, a very unusual and highly decorative feature. Altogether this specimen evinces a remarkably fine quality; most of the vessels of this class, in the Middle Chou style, are clumsy and coarsely worked.

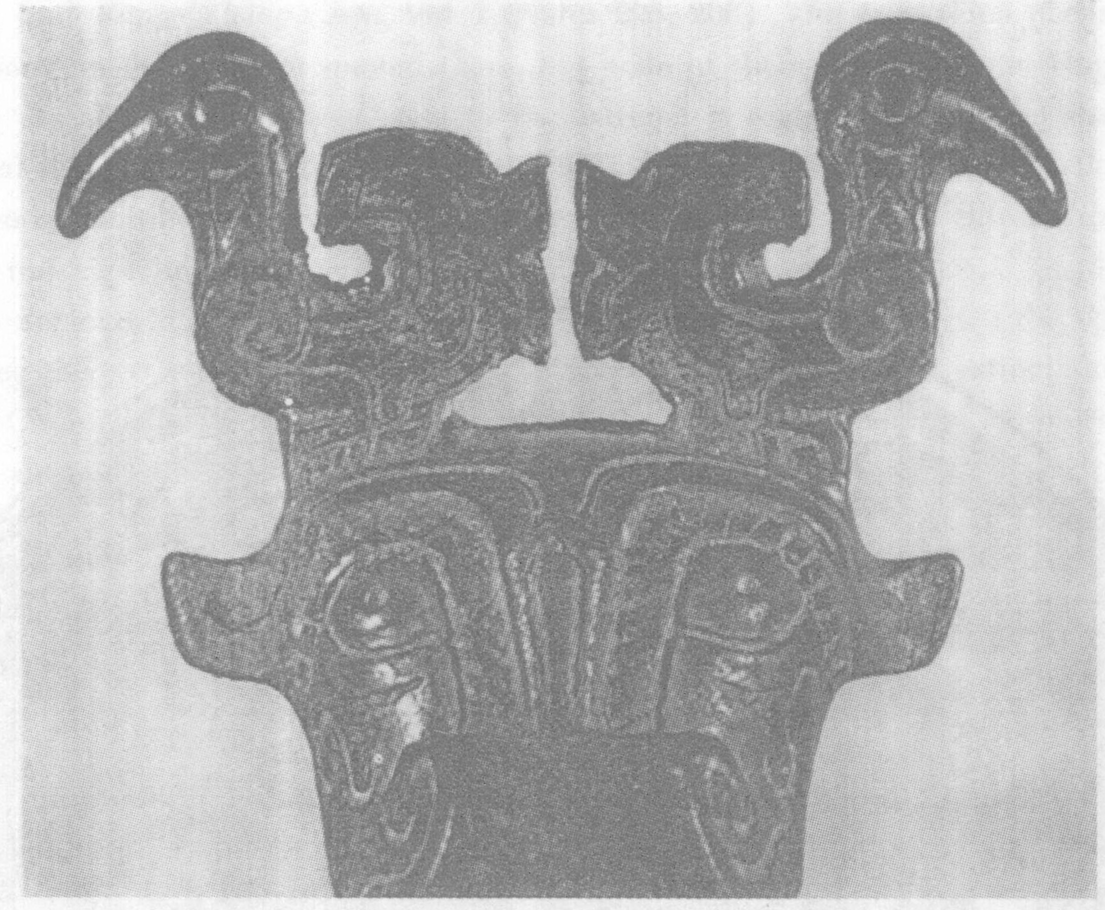


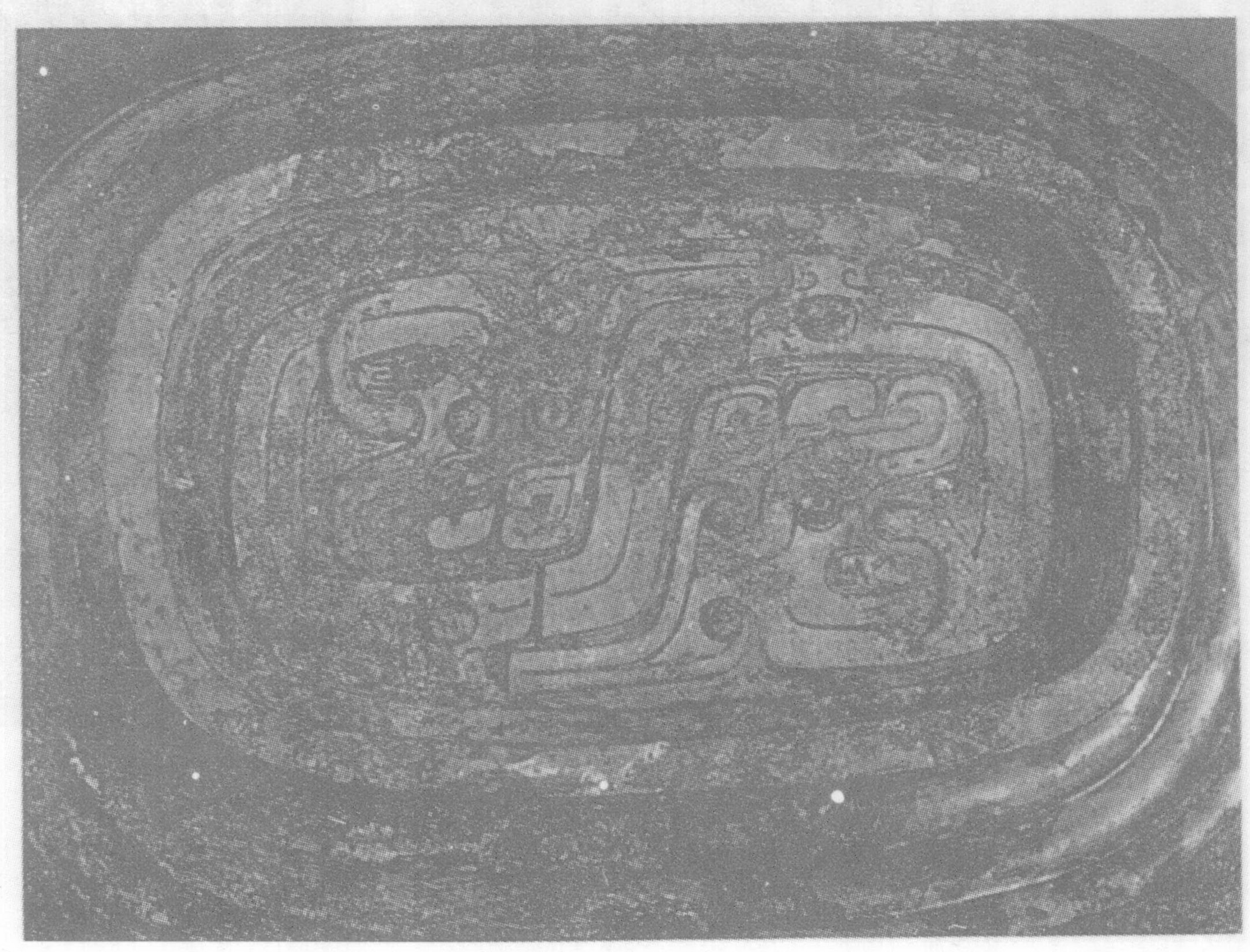
figure 52

The inscription (figure 52) reads: "The t'ai-shï Tsï Ta for the Eldest Lady Kiang has made the Ih to be brought along when married; with it may one sacrifice, may one show filial piety, may one pray for a vigorous old age; may sons and grandsons use it as a great treasure." The word sequence in the beginning—*t'ai shï Tsï Ta Meng Kiang tso ying Ih*—is apt to cause misgivings; we should expect: *t'ai shï Tsï Ta tso Meng Kiang ying Ih.* It would not help to interpret instead: "Tsï Ta and the Eldest Lady Kiang made . . .," for it never occurs, in the inscriptions of this type, that two persons stand as producers. Nor would it do to interpret: "The child of the t'ai shï, the great Lady Eldest Kiang," for there are never such epithets ("great") in the bronze inscriptions. Thus, unless we are to declare the inscription forged and faulty, for which there is otherwise no reason, we have to accept the unusual inversion. The first words could, of course, mean: "Ta, son of the t'ai shï," but that seems farfetched, since names of the type Tsï Ta were common in Ch'un-ts'iu time.

Middle Chou. HEIGHT: 6 1/2 inches. LENGTH: 11 7/8 inches. PATINA: green. PUBLISHED: Bull. Minn., 28:22.

NUMBERS 45 AND 43 PLATE 64





NUMBER 46. *P'an.* PLATE 65

This P'an basin is curiously disposed, insofar as the vessel, though it has, as is proper, a shallow bowl and a foot, does not rest, after all, on its foot. Three small human figures sustain the vessel by gripping the rim of the foot; they turn outward, and their bending knees very expressively suggest the weight of their burden. There are two regular handles (bent ears), on top of each of which reclines an ox in a calm pose with the head turned outward and the legs folded in under the body. The usual division of the vessel into sections is achieved by two more animals, contrasting very strongly with the restful oxen. They are dragons which, with a vigorous movement, climb the sides of the bowl and bite on its rim; they have a broad, rolled-up nose and C-shaped, tufted horns. The décor is, for the rest, very simple: on the foot, hanging scales of an advanced, nearly squared type; in the neck belt, broad, figured bands.

Middle Chou. HEIGHT: 6 7/8 inches. WIDTH: 21 1/4 inches. PATINA: green, sharp, with patches of blue. PUBLISHED: Bull. Minn., 30:14.

NUMBER 46 PLATE 65





NUMBER 47. *Ting.* PLATES 66 AND 67

This unique specimen is one of the foremost treasures among Chinese bronzes. It shows the typical features of the already ripe and advanced Huai style, in one of its many branches. The bowl and the domed lid form together a spherical shape, slightly broadened out and very heavy and pompous on its short and strongly bulbous legs, which raise the bottom but little above the ground. The big and heavy, nearly squared, bent ears contrast curiously with the three slender and graceful animals which rest with folded-in legs on the lid and turn their heads outward, in a pose common in the Middle Chou style and in the Huai style, and certainly due to an influence from the Northern animal style.

The décor is effected through inlay of silver in richly varied patterns: on the lower part of the belly there are big, heart-shaped figures which had a zoomorphic origin (see the horns on the dragon on our vessel 31), but which became strongly favored as an independent motif particularly on mirrors of the fourth and third centuries B.C. (both the Shou-chou and the Lo-yang groups; see BMFEA, Vol. 13, Plates 12, 30) and also on many ritual vessels (e.g., the Hu from Li-yü [northern Shansi] in Umehara, *Seikwa*, Vol. 3, Plate 169). The figures in the neck belt are really geometricized derivatives of crossing dragons (here again the heart shape recurs in every second lozenge), and those seen on the sides of the handles can be deciphered as being of bird origin, if compared with the lacquer patterns from Huei-hien in Honan (in BMFEA, Vol. 7, Plate 16). In fact, the thin cross-line ending in a T on one side, in a hook on the other, is a remnant of the bird's wings. On the lid the hexagonal again has the heart shape in every second angle, and outside every second there is a motif probably deriving from antithetical pairs of bird-dragons. Flanking these figures there are big dragons with two pairs of legs and scaly bodies, characterized by a wonderful litheness and mobility. This décor of the lid is closely cognate with that of a famous inlaid mirror in the Freer Gallery (Freer Cat., Plate 37).

One of the most interesting and historically significant features of this bronze is the covering with pear-shaped figures on the bodies on the three recumbent animals. They reveal an influence from the Ordos art (Northern animal style); see BMFEA, 9:104, where the technique of our Ting is described in detail.

Huai style period. PROVENIENCE: stated to come from the Kin-ts'un tombs near Lo-yang (datable *circa* 450-230 B.C.; see BMFEA, 10:81). HEIGHT: 6 inches. WIDTH: 7 1/8 inches. PATINA: dark brownish-red with green patches. PUBLISHED: Bull. Minn., 28:22; Karlgren, New Studies, Plate 59; Davidson, Plate 17; Umehara, *Rakuyō*, Plate 10; Umehara, *Etude*, Plate 119; Comstock, figure 7.

NUMBER 47 PLATE 66



NUMBER 47 PLATE 67



NUMBER 48. *Wine vessel.* PLATE 68

In the Huai style period there are so many hybrid vessels, not exactly fitting into the earlier categories of ritual vessels, that it is futile to assign any technical names to them. The present vessel was called Hu by Umehara (*Seikwa*, Vol. 3, Plate 220, and *Rakuyō*, Plate 12), and Menzies followed this (Menzies, number 47); but Umehara in his second-mentioned work, as well as in his volume on Huai style vessels (*Etude*), has classified several vessels of quite the same shape as Lei. Jung Keng (*Shang Chou*, 2:479) calls our vessel a Min (Ming), but he has several vessels of quite the same shape which he calls P'ou.

The vessel is closely cognate with the preceding, being inlaid with silver and, on the shoulder band, with gold and silver. The movable ring handles, with an inlaid volute pattern, are fixed in the mouth of a silver *t'ao-t'ie* mask applied to the shoulder. The décor patterns in the various belts, to a large extent formed by single and double volutes and volutes with triangles, typical elements of the Huai décor, are sure to be, in part at least, extremely corrupted and geometricized derivatives of zoomorphic motifs (dragons and birds). They are not identical but closely cognate with those on the preceding vessel (47). Our vessel is a worthy companion to, and probably belonged to the same set as, that vessel, being likewise stated to hail from Kin-ts'un near Lo-yang; and it is one of the most splendid examples of Late Chou bronze art and inlay technique.

Huai style period. HEIGHT: 9 3/4 inches. WIDTH: 12 1/2 inches. PATINA: dark brown with green patches. PUBLISHED: Bull. Minn., 34:18; for others, see above.

NUMBER 48



PLATE 68

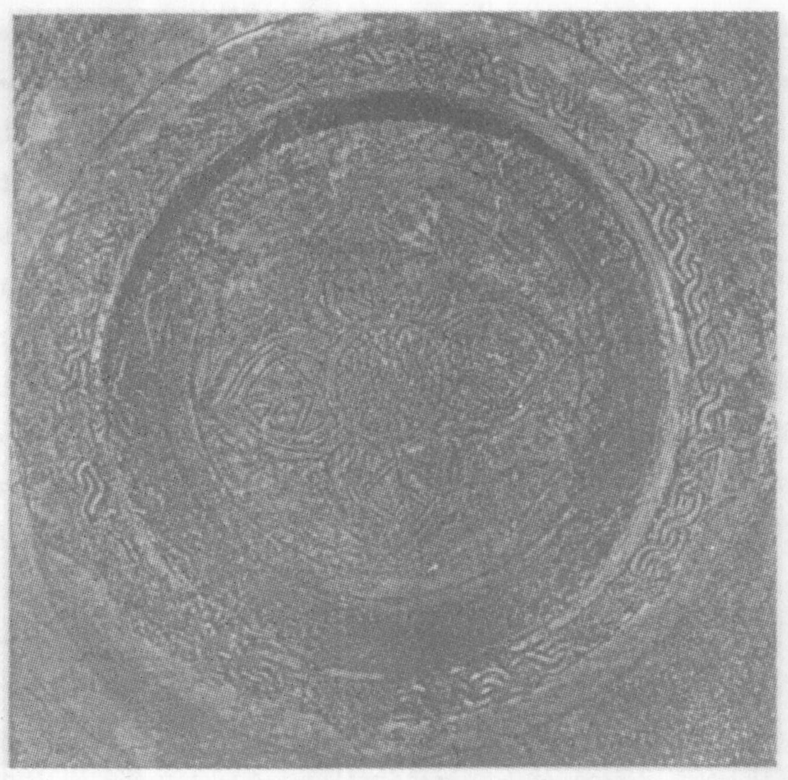
NUMBER 49. *Ting*. PLATE 69

This type of vessel, an indubitable Ting, has curiously enough been classified as a Tuei by Jung Keng (*Shang Chou*, Vol. 2, Plates 205, 206). The term Tuei occurs in the inscriptions on three vessels quoted there, but none of them resembles our Ting here.

This vessel brings the Huai style to the extreme in regard to the vessel shape. It is a general rule that in this style the body of a Ting is big and bulky, in proportion to the very short, dachshund-like legs. The present specimen has carried this to the fullest extent: the high lid (with a ring-shaped top which can serve as foot if the lid is inverted) achieves a fully spherical shape, and the legs are very tiny. On the upper part of the leg there is a *t'ao-t'ie* with spiral horns (the *t'ao-t'ie*, practically extinct during the Middle Chou era, now being resuscitated). In the décor belts there are dissolved dragon figures, and on the handle a row of cowries bordered by rope-patterned bands. On the ring-shaped lid top there is a loosely twined cord pattern which encloses a quatrefoil centered with a granulation-filled disk.

Huai style period. HEIGHT: 6 3/4 inches. WIDTH: 8 7/8 inches. PATINA: blue-green.

NUMBER 69 PLATE 69





NUMBER 50. *Ting*. PLATE 70

This vessel has been termed an An by Alan Priest (in *An Exhibition of Chinese Bronzes, Metropolitan Museum of Art*, 1938), and Umehara (*Rakuyō*, Plate 6) applies the term Chou ("boat") to a vessel in the Royal Ontario Museum which in shape and most features is exactly like our present bronze. What their reasons are is unknown. It is a Ting, with four figures with human bodies and horned animals' heads supporting the bowl on their backs and outstretched arms. It is just as much a Ting as the Ting with supporting animals (vessel 4).

The bowl has the broad and bulky Huai style shape. The ring-shaped handles have been provided with a curving-out lower projection which, together with the outer bend of the ring, forms a dragon body with curled-up tail, and this dragon has a *t'ao-t'ie*-like horned head. The ring-shaped top of the lid, which is adorned with a triple-strand plait pattern in openwork, is fixed to the lid with a row of props. The close affinity with the Toronto vessel (see above) is interesting, since it is known that the latter hails from the Kin-ts'un graves (*circa* 450–*circa* 230 B.C.).

Huai style period. HEIGHT: 5 inches. LENGTH: 8 5/8 inches. PATINA: green.

NUMBER 50



PLATE 70

NUMBER 51. *Kien.* PLATE 71

This vessel is called Kien in its inscription. A Kien was fundamentally a basin for holding water, but in all likelihood our vessel was not a profane vessel but a ritual one (cf. the discussion under vessel 31). A companion vessel exactly like the present one and with the same inscription is in the Freer Gallery of Art. Its inscription, "Kien-vessel [to be] handled [i.e., used] by the nobleman Chï," has been extensively discussed in Freer Cat., p. 57, and the convincing conclusion reached that the vessels must have been made anterior to 453 B.C., since the powerful house of Chï was then overthrown.

The shape is much like that of the earlier Kuei. There are four stout handles, with a thin, flat, movable ring suspended from each. The décor consists of three belts separated by bands of plait pattern, each strand in the plait made up of a number of very thin threads. A similar plait is on the foot rim. On the neck rim there is a narrow band of cowries. In the top and bottom belts there are interlaced dragons. Every second has the head close to the lower margin, the intervening heads being close to the upper. Thus, for instance, in the neck belt, the two interlacing dragons in the center of the belt have the shape illustrated in our figure 53. In the broad central belt, there are *t'ao-t'ie* heads, every second seen right as the vessel stands, the intervening ones seen from above (with the photograph held inverted, figure 54). The intricate pattern of the interlacing bodies is best discernible in our figure 54.

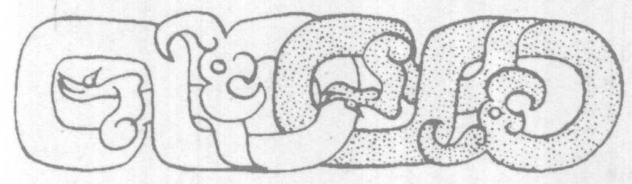


figure 53

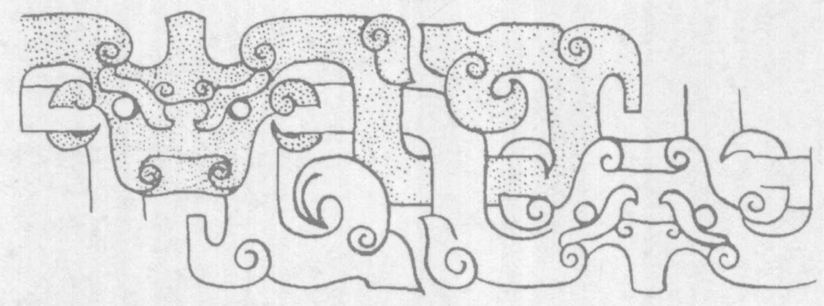


figure 54

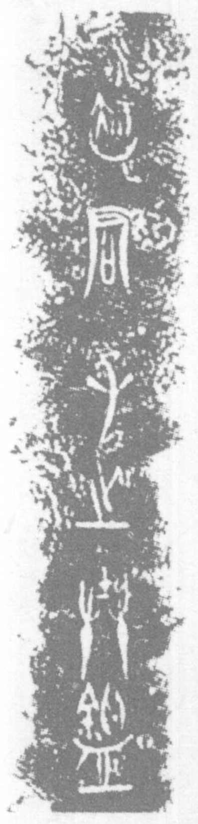


figure 55

The technical execution of these décor elements – narrow, bare borders to every band, the center filled either with spirals or with volutes with triangles – is exceedingly similar to that on the vessels of the Li-yü find (Umehara, *Etude*, Plates 1 ff.); this is particularly interesting since Li-yü is in northern Shansi, and the present vessels, according to Jung Keng (*Shang Chou*, 1:470), were found in Hueihien in northern Honan, thus both belonging to the northern sphere. The *t'ao-t'ie* head on top of the handle, with its broad, rolled-up nose and the protruding, hooked crest in the place of the ancient forehead shield, is very different from the ogre head of the early periods. On the side and on the front surface of the handle there is a row of stylized cicadas; on the rings are interlaced dragons.

The inscription (see above) is reproduced in figure 55.

Huai style period. HEIGHT: 8 7/8 inches. DIAMETER: 17 1/4 inches. PATINA: light green with blue patches. PUBLISHED: Bull. Minn., 30:14; Menzies, Plate 24; Comstock, figure 13.

NUMBER 51



PLATE 71

NUMBER 52. *Wine vessel.* PLATE 72

This vessel was called a Lei in *The Chinese Exhibition, a Commemorative Catalogue* (London, 1936), Plate 28; and Umehara likewise defines a vessel of the same shape as Lei (*Etude*, Plate 16, a vessel from Li-yü). On the other hand, an almost identical vessel in the Sumitomo collection (*Senoku*, Vol. 2, Plate 57) is classified as a P'ou. Jung Keng follows this (*Shang Chou*, 2:472), and Umehara, inconsistently, uses the same term P'ou for a vessel of the same shape in the Freer Gallery (*Seikwa*, Vol. 2, Plate 136). As stated under vessel 48 above, it is futile indeed to assign the various hybrid vessels of the Huai era to any of the definite vessel classes of the ritually stricter early epochs.

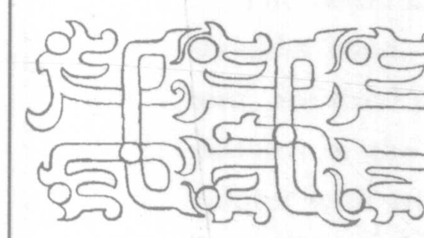


figure 56

The stout handles on the shoulder are surmounted by *t'ao-t'ie* heads which are so far archaizing as to have the traditional recumbent C-shaped horns, though adorned with big tufts. The décor, in five successive belts, is a pattern of interlaced dragons, executed in narrow, flat double-bands (see figure 56). The eyes and the points where the tails of an upper and a lower dragon interlace are marked by high, wartlike buttons.

The inscription (figure 57) is spurious and has been cut into the rim in modern time. It reads: "In the 2nd month, 1st decade, on the day Ting-mao Lady Kung Ki ordered Chao to have the management of the fields; Chao had his merits reviewed [?] and was given a horse and was given a fur coat. In response he extolled Kung Ki's grace and so made the precious vessel." This is a well-known inscription, found on one "Tsun" and one "Yu," but it is of Early Chou time, and (no Yu existed in Middle Chou or Huai) is much too archaic for this Huai style vessel. It was easy for the forger to copy it, since it has been reproduced by Yüan Yüan, *Tsi ku chai chung ting yi k'i k'uan chi* (1804), v.7, by Wu Shi-fen, *Kun ku lu kin wen* (1895), I.iii.59, and by Liu Sin-yüan, *K'i ku shi* (1902), VI. 14. It should be emphasized that it is the inscription only which is a forgery. The vessel itself is beyond reproach or suspicion, and a Huai style specimen of the highest class. It belonged earlier to the C. G. Seligman collection.

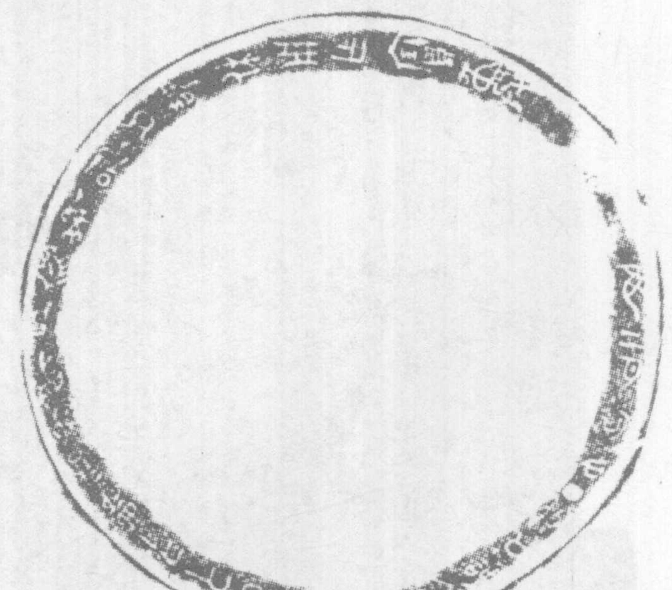


figure 57

Huai style period. HEIGHT: 10 inches. WIDTH: 12 1/8 inches. PATINA: grey-green. PUBLISHED: *The Chinese Exhibition, a Commemorative Catalogue* (London, 1936), Plate 28 (inscription wrongly reproduced); Karlgren, BMFEA, Vol. 8, Plate 53.

NUMBER 52



PLATE 72

NUMBER 53. *Hu.* PLATE 73

This is one of the important group of hunting-scene Hu flasks which can with certainty be dated as pre-Han, since many of them have décor elements that belong to the Huai style and did not survive into Han time. The group is particularly interesting since it evinces an influence from the Northern Nomad art style ("Ordos"); see BMFEA, 9:106 ff. Quite a number of these hunting-scene vessels are reproduced in Umehara, *Etude*.

Our present Hu (*Etude*, Plate 87) was first published in Huang, *Tsun ku chai*, II.36, with rubbings that are so useful that we have reproduced them here (figures 58 and 59). The Hu has the ordinary shape of this class and two small handles with movable rings, suspended from the mouth of a small *t'ao-t'ie* mask (for this see the rubbing). The foot has a narrow belt with a band of volutes with triangles, the volutes here turned into birds' heads. On the vessel proper there are six narrow bands in low relief with swastika-like figures, these latter being merely a corruption of the well-known whorl circle (e.g., Plate 29).

The five belts have had their décor impressed by dies, with sometimes curious results. In the lowest belt, for instance, just above the head of the animal (wild ox?), there is a fragment of a bird drawing, being merely a wing and a leg, as can be realized by comparison with the birds in the second-lowest belt; evidently the scene originally was broader, with a row of birds over the man and the animal, but through lack of space this top section was cut off. The man has a short sword or knife in his raised hand, and a long sword scabbard at the waist. He has dropped his shield before his feet (that this is really a shield is proved by an analogous scene on a Hu in Jung, *Wu ying*, p. 110, Umehara, *Etude*, Plate 90, where a man holds a shield of this shape in his hand when attacking a beast). The man has a headdress which looks like feathers(?).

In the second belt there are first four birds, two big ones in the center flanked by two small ones, and, directly in the center, a flying arrow with string attached; above this again the same kind of beast, here with a spear thrust into its shoulder, attacked by two men with the same feather crown, sword, scabbard, and dropped shields. In the third belt there are three shooting archers with one knee bent and the whole body so violently bent backward that the head feathers point slightly downward to the right. The arrows have strings attached, ending in a ball; above this the same row of four birds and flying arrow as in the preceding belt, and above them three more birds.

The shoulder belt is particularly interesting. To two panels in the lower belts there corresponds here one broad panel with a very vivid and fine hunting scene. Farthest to the right there is a tiger with a spear thrust through its neck; a man grips its tail and attacks it with his sword. Below this there is a boar which a man attacks with a spear, and on his right a dog. In the middle of the panel there are two birds and two dogs. To the left in the panel we have a carriage, with a dog close in front of the wheel. The team is of four horses, two on each side of the shaft (the two to the left drawn inverted). On the chariot there are two men, one driving, the other shooting rearward. Above the latter there is a bird. It has something on the shoulder which might be a wing(?). The

NUMBER 53 PLATE 73

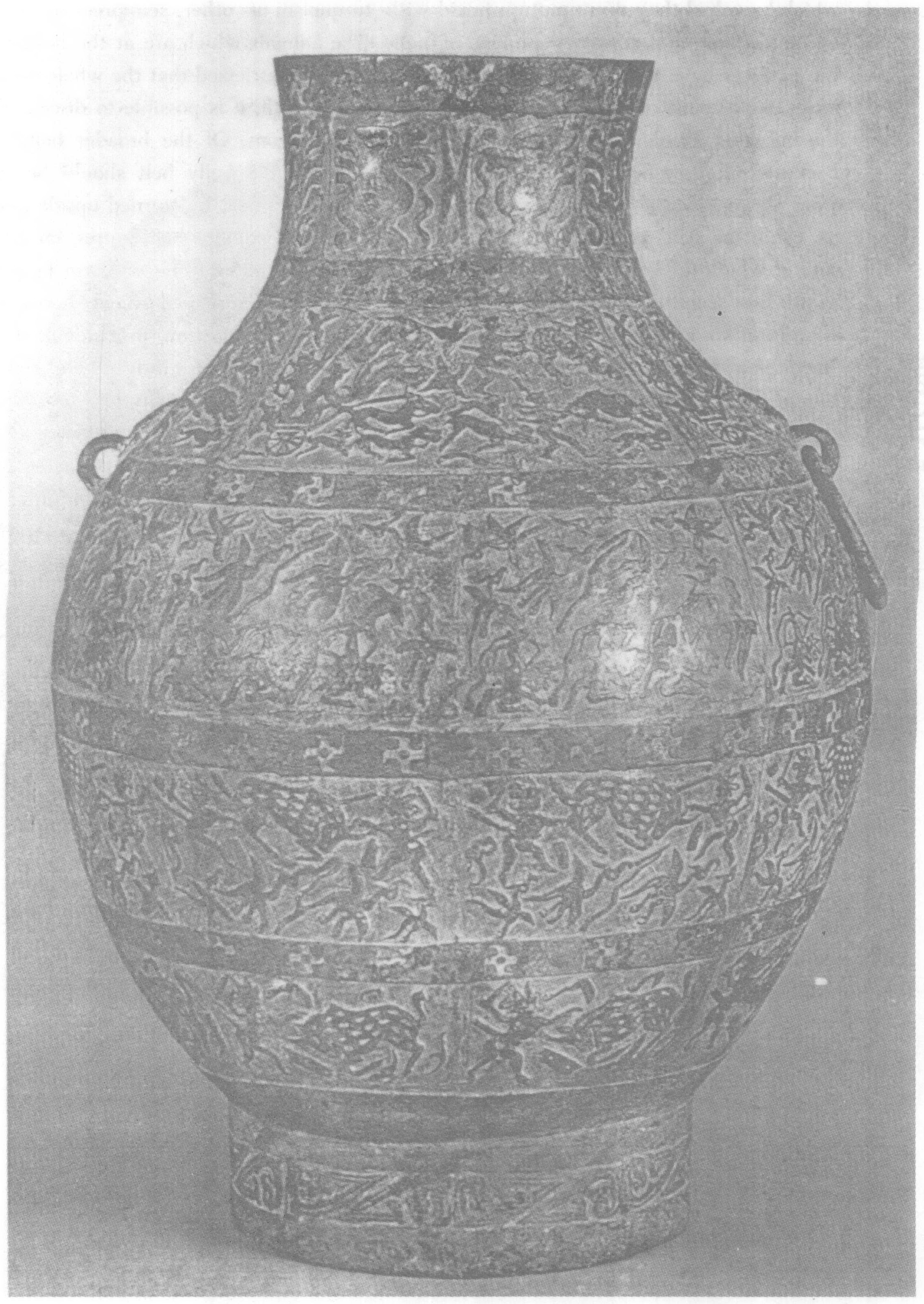




figure 58

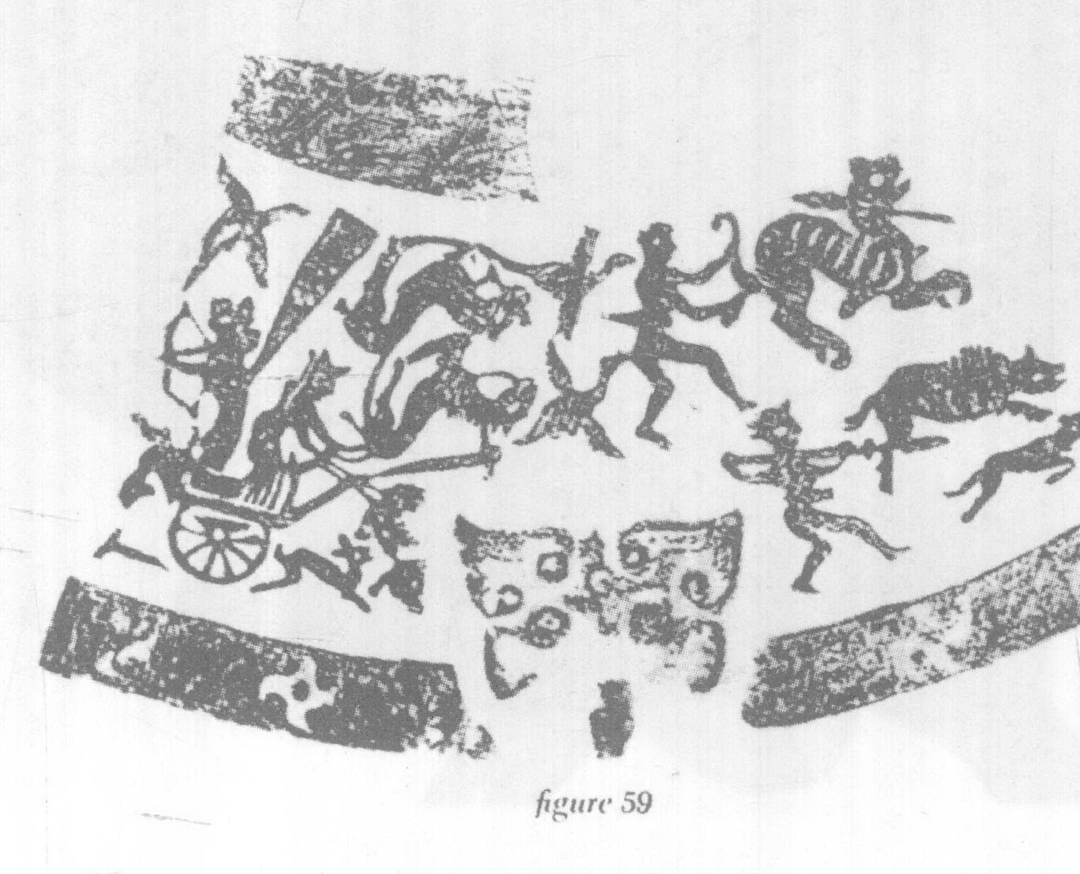


figure 59

four men in this panel do not have feathers like those below, but some kind of crown-like caps. In the neck belt there are birds which swallow snakes.

Altogether these hunting-scene Hu vessels are a quite revolutionary new departure in the Chinese bronze art. Earlier there were no real scenes, only figures placed antithetically or consecutively, mostly with the strictest regard for symmetry. Here we have, for the first time, freely disposed living scenes. Particularly the panel on the shoulder is remarkable in this respect: the rule of a symmetrical arrangement, obtaining from hoary antiquity, is all of a sudden here thrown overboard, and the artist has depicted a varied and mobile scene extending all over the broad panel without the slightest regard for symmetry. There can be no doubt that this emancipation from the strict rules of antiquity was due to foreign influence, as already revealed by the details referred to above.

Huai style period. HEIGHT: 13 7/8 inches. WIDTH: 9 1/2 inches. PATINA: green.

NUMBER 54. *Square Hu.* PLATES 74 AND 77, TOP FIGURE

This beautifully proportioned vessel, with its soft profile, is typical of a group of Hu which have had their décor pattern inlaid with turquoise or other semiprecious stones and sometimes, in part, with some kind of niello. The animals which are at the bottom of the patterns have been so corrupted, dissolved, and geometricized that the whole surface looks like a maze of crossing lines, hooks, and spirals. Still, it is possible to discern that the narrower bands have remnants of intertwining dragons. Of the broader belts, the neck and shoulder belts should be seen as they are, but the belly belt should be seen from above, since it has the same pattern as the shoulder belt, but turned upside down.

In all the belts there are, in the median line, some medallion-like figures, on either side of which the pattern is symmetrically arranged. The middle one of these figures – as it is best seen in the neck belt – is the *t'ao-t'ie* mask, with forehead shield, horns, and nostrils, as we know it from many appliqués. This granted, it seems probable that the "medallion" below it, in the lower part of the belt, is a further elegantly playful corruption of the same motif (yet with standing C-shaped horns). Occasionally it is possible, in the maze of the décor, to discern a definite shape, e.g., dragons to the left and right of the central medallion (figure 60), but on the whole the zoomorphic origin of the pattern has been entirely obscured.

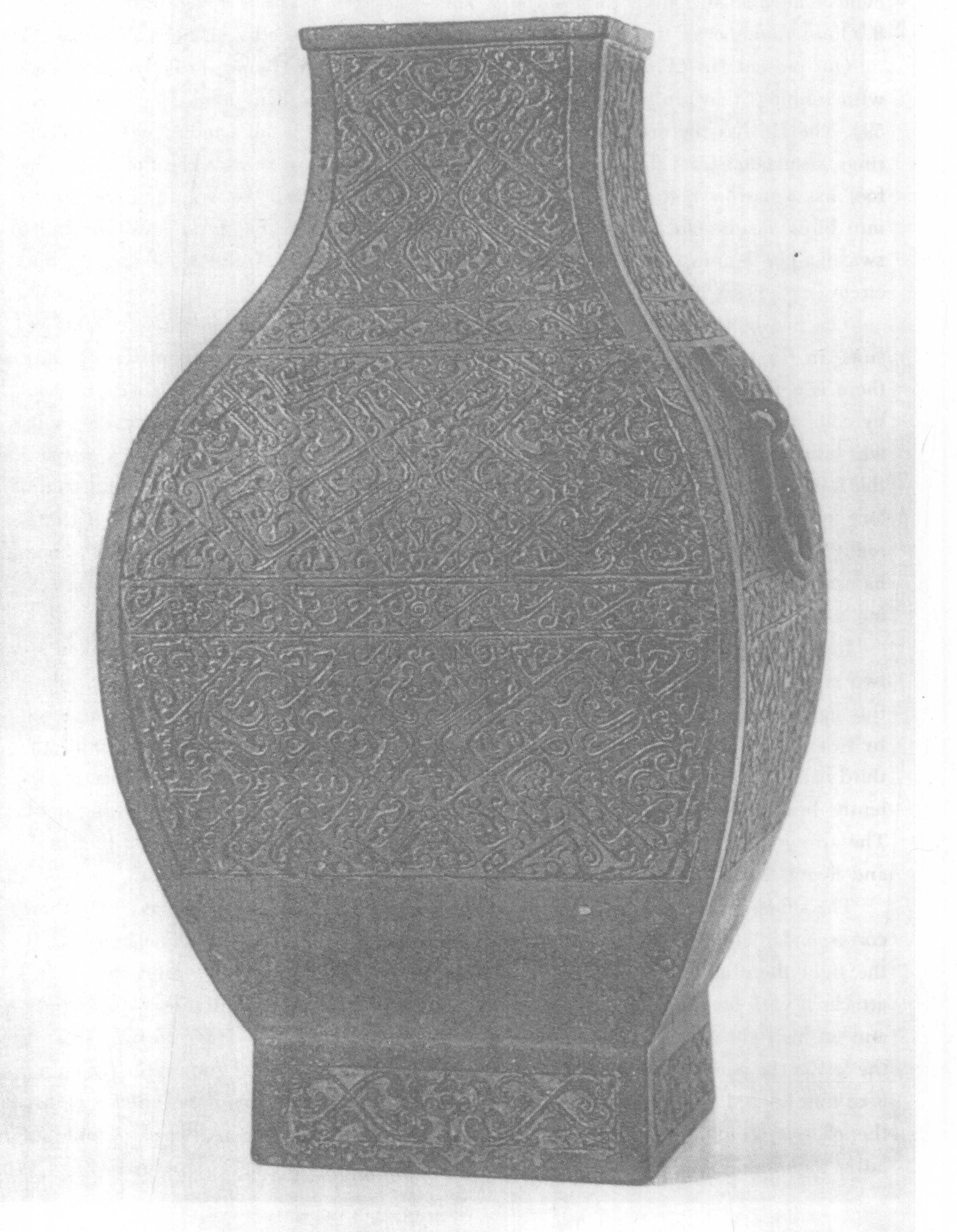


figure 60

The *t'ao-t'ie* on the handle ring (Plate 77, top figure) has a particularly interesting feature: between the eyes there is a figure showing one round knob in the center surrounded by six other knobs. This is really a Yin-time motif which has been revived (see, for example, BMFEA, Vol. 8, Plate 28). It recurs below on our specimen 63 (Plate 89).

Huai style period. HEIGHT: 14 1 8 inches. WIDTH: 8 1/8 inches. PATINA: silvery-green.

NUMBER 54 PLATE 74



NUMBER 55. *Hu.* PLATES 75 AND 77, MIDDLE FIGURE

This Hu flask, of a very unusual shape, being uncommonly spherical, has the body divided by narrow bare bands with high ridges into four belts enclosing bands of double spirals. The belts are everywhere filled with the comma pattern (as are also the rising blades on the neck), the origin of which was demonstrated in detail in BMFEA, 13:31 ff. The *t'ao-t'ie* on the ring handle has scale bands on top and two big scales under the eyes.

Huai style period. HEIGHT: 11 3/8 inches. WIDTH: 9 3/4 inches. PATINA: blue-green. PUBLISHED: first in *Shi er kia ki kin t'u lu*, Tsun 12, and then in Jung, *Shang Chou*, 2:403.

NUMBER 55 PLATE 75



NUMBER 56. *Flat Hu.* PLATES 76 AND 77, BOTTOM FIGURE

Jung Keng (*Shang Chou*, 2:481) calls this an Ou, for insufficient reasons. A vessel similar to this, published in drawing in *Si Ts'ing ku kien*, 34:5, has an inscription in which it is called Ou, but the inscription is of Han date, and can tell us nothing about the proper name of this vessel type in pre-Han times. The chequer motif achieved by the plain bands (in the present case with raised borders), each chequer filled with the comma pattern (cf. vessel 55 above), is common on these flat Hu; cf., for instance, Jung, *Wu ying*, p. 122 (Imperial collection), Umehara, *Seikwa*, Vol. 3, Plate 187 (Verburgt collection), etc. The rising blades on the neck are bare. The *t'ao-t'ie* mask on the handle (Plate 77) has the volute with triangle as the principal décor feature (on the ring in inlay work); on the cheek line there is a granulation pattern.

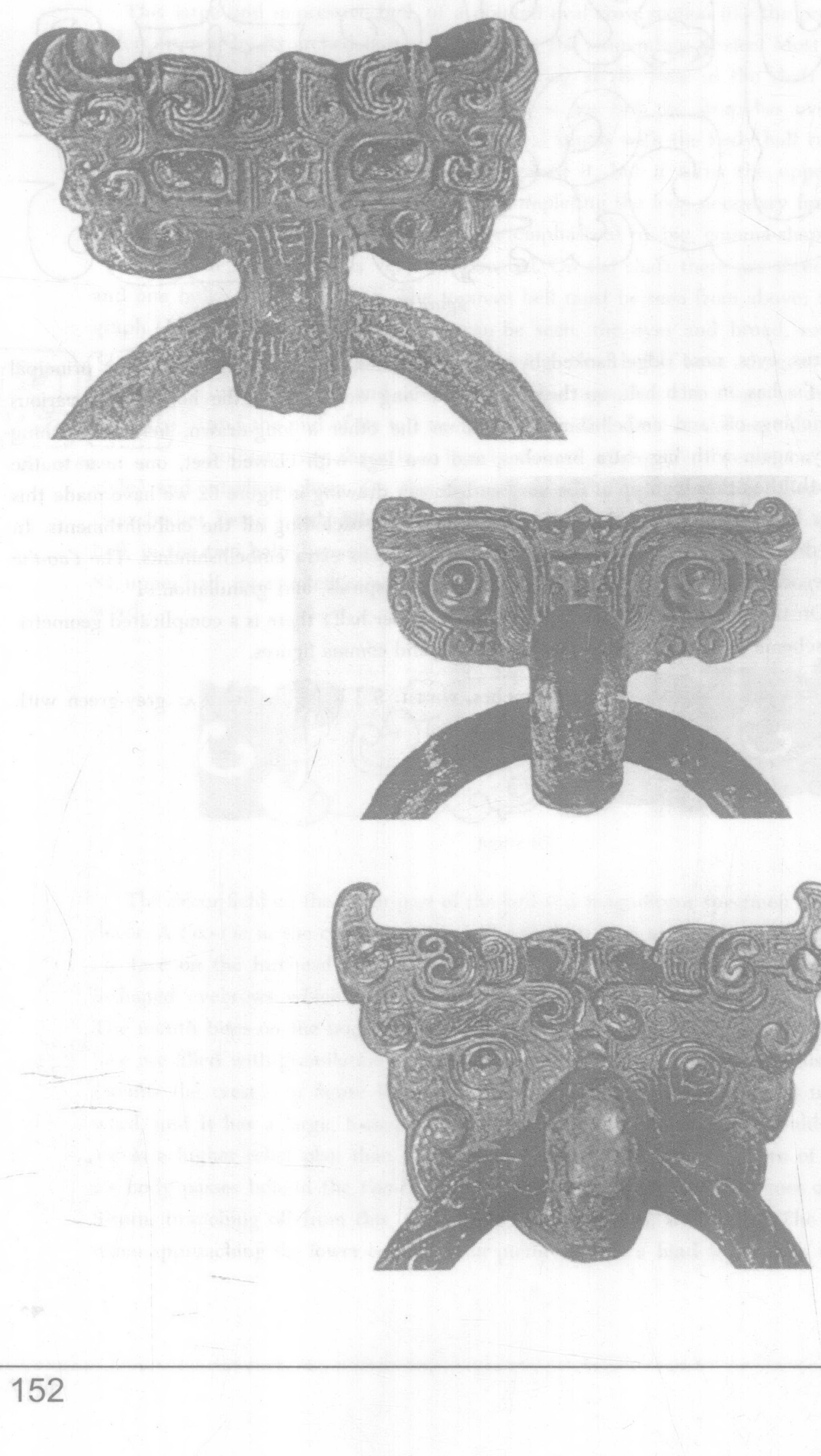
Huai style period. HEIGHT: 13 1/4 inches. WIDTH: 13 1/4 inches. PATINA: greenish-grey.

NUMBER 56



PLATE 76

NUMBERS 54, 55, AND 56 PLATE 77



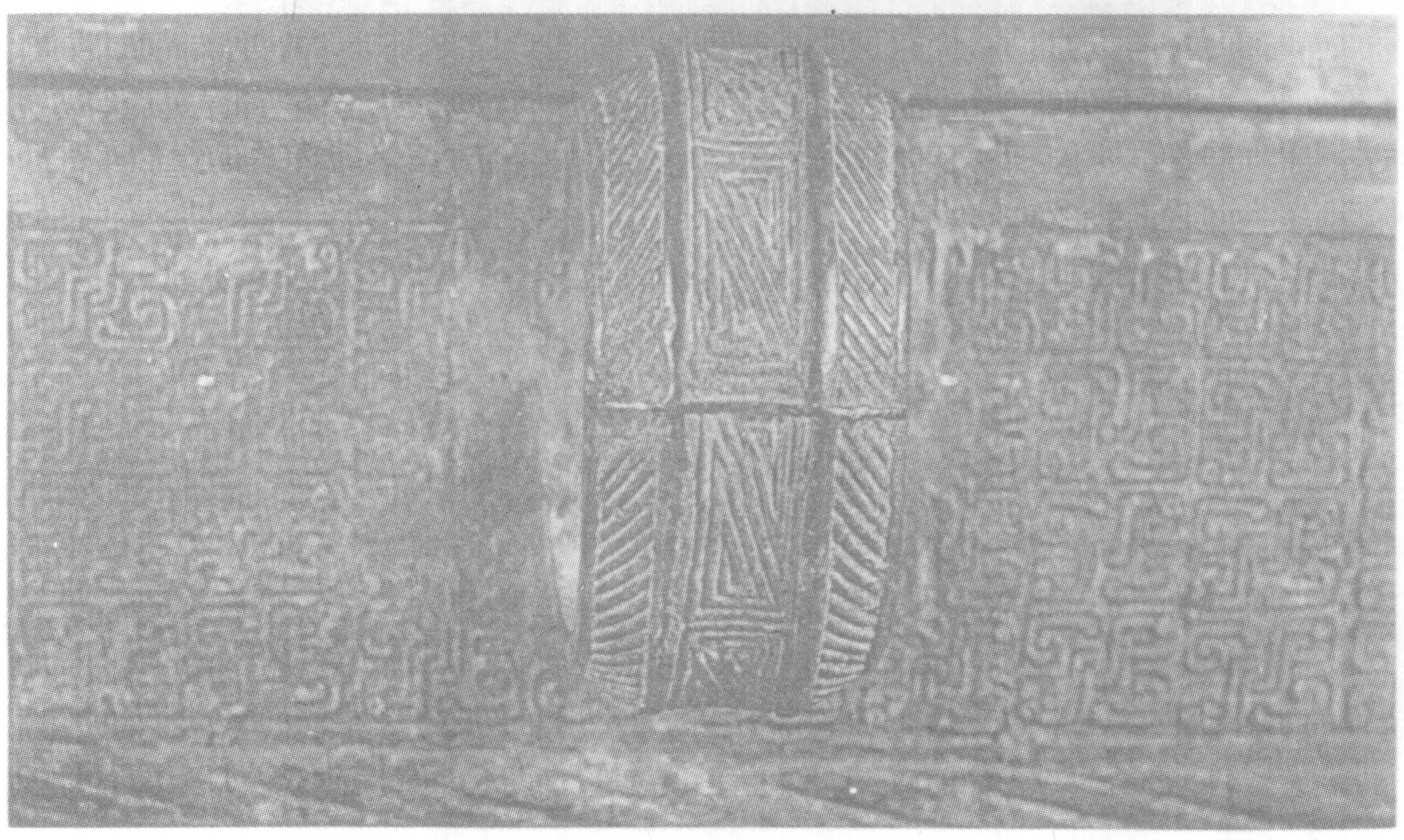
NUMBER 57. *Tou,* A PAIR. PLATES 78 AND 79

That this denomination for this kind of vessel is correct is confirmed by inscriptions. The body and lid together form a slightly flattened sphere, which is huge and heavy in proportion to the stem and the fairly small foot. The lid, inverted, can serve as an independent dish. On the top of the lid (see Plate 79, upper half) we have a whorl circle surrounded by rows of squared spirals in the center, and outside this a broad zone with interlaced snakes on a granulation ground. On the lid proper there are three belts separated by bare bands; they are filled with minute comma-pattern. On the vessel's body there is, after a bare rim band, a similar belt of commas, but this is delimited by a narrow, rope-patterned relief band. Below this, again a comma-patterned zone, which, however, is quite narrow and goes over into a row of heart-shaped hanging blades with commas. On the foot there is a belt with interlaced snakes on a granulation ground, as on the lid. The ring-shaped handles have pointed spirals and rope pattern (Plate 79, lower half).

Huai style period. HEIGHT: 8 1/4 inches. WIDTH: 9 1/8 inches. PATINA: grey-green with patches of blue.







NUMBER 58. *Bell, Chung.* PLATES 80 AND 81

This richly adorned bell, of a pointed, oval cross section, is very typical of the advanced Huai style. Its suspending device consists of one big snake (seen *en face* in the photograph) with two bodies, each going up in a bold S-curve. It is flanked by two tigers, which pass their long necks under and around the first bend of the snakes' bodies, and turn their heads to rest their noses on their own backs. The snakes' heads rest on their short front paws; their shoulder line is emphasized by a big, comma-shaped flat spiral; their hindquarters have similar comma-shaped loops; and their whole bodies are covered with granulation.

On the bell proper there are rows of bosses adorned with snakes, and, in the narrow belts between, dragons. These have been applied by dies, and since the original drawing was somewhat broader, parts of the bodies have been cut out. The proper shape of the dragon is revealed by the belt on the other side of the bell (not visible in our photograph, but in Menzies, Plate 25), our figure 61. We find this dragon figure, slightly truncated, to the left in the belts in our Plate 80, and, seen from above (photograph held inverted), to the right.

In the big bottom belt on the bell there is an exceedingly elaborate *t'ao-t'ie* (Plate 81, lower half). In the center, the eyes and broad, rolled-up nose are easily discernible. In a small empty space on the forehead there is an additional rudimentary *t'ao-t'ie*

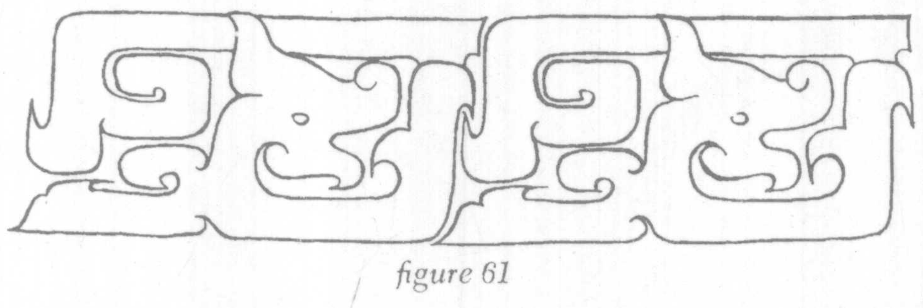


figure 61

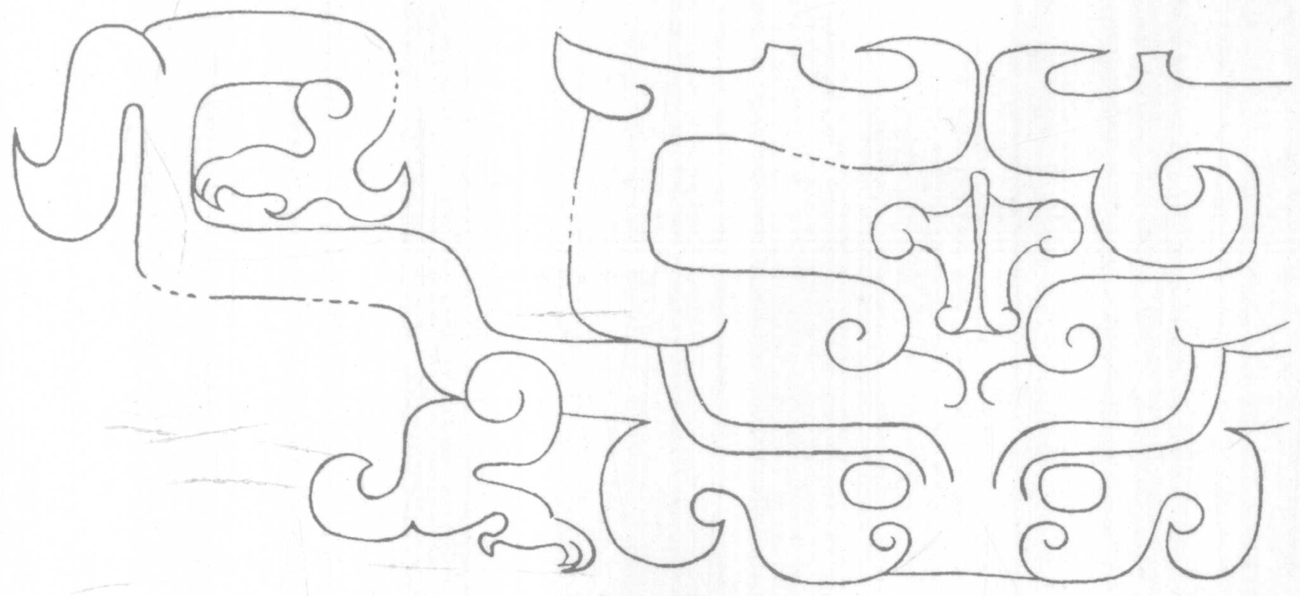


figure 62

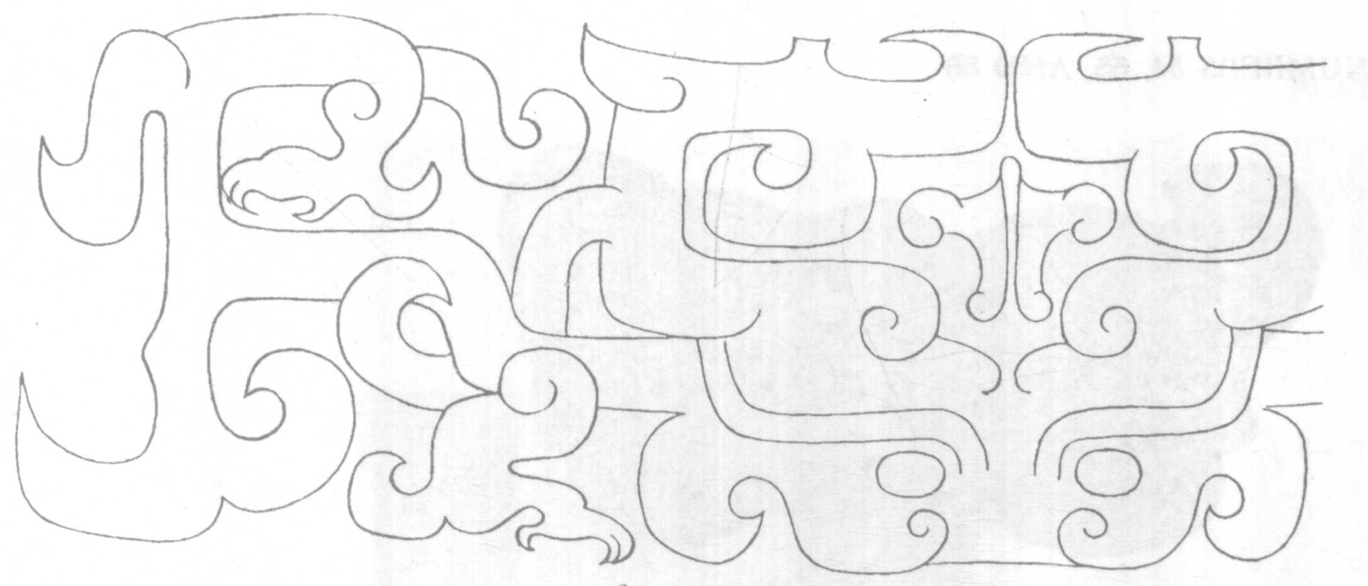


figure 63

(horns, eyes, nose ridge flanked by granulated lines, and curled nostrils). The principal *t'ao-t'ie* has, in each half, on the one hand a long extension to the horns, with various branchings-off and embellishments, and on the other a long-drawn, fiercely writhing body, again with big extra branches, and two legs with clawed feet, one near to the mouth, the other high up at the very end. In our drawing in figure 62 we have made this clear by including only the principal features and excluding all the embellishments. In our drawing in figure 63 we have added the various extra embellishments. The *t'ao-t'ie* is decorated alternately with scale rows, pointed spirals, and granulation.

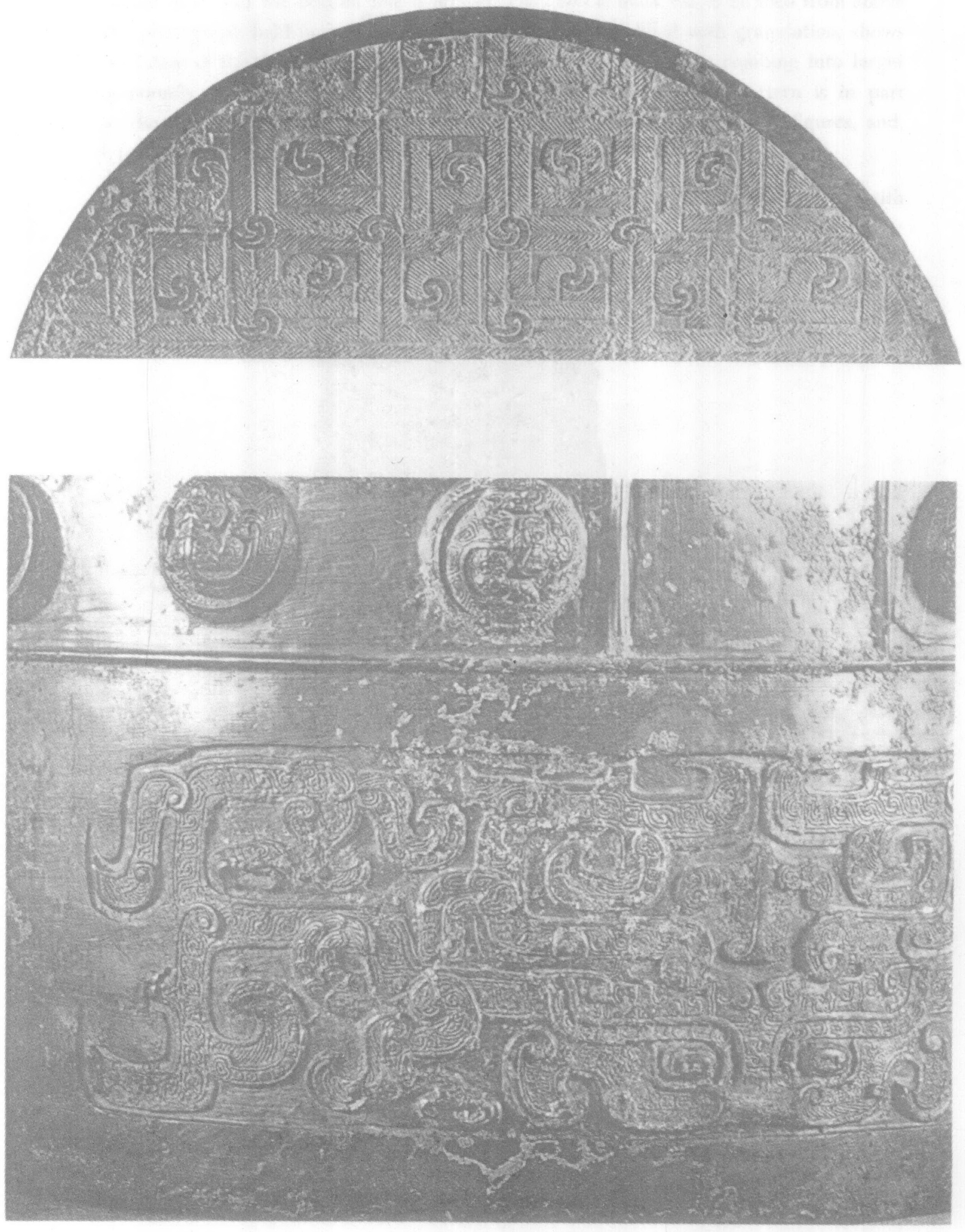
On the top surface of the bell (Plate 81, upper half) there is a complicated geometrical scheme of narrow, rope-patterned bands and comma figures.

Huai style period. HEIGHT: 12 1/2 inches. WIDTH: 9 1/2 inches. PATINA: grey-green with blue patches.

NUMBER 58 PLATE 80



NUMBER 58 PLATE 81



NUMBER 59. *Bell, Chung.* PLATES 82, 83, AND 84

This large and impressive bell, of a pointed oval cross section like the preceding one, differs from it by its arched bottom line and in the suspending device. Most of the bells of the present type have a vertically placed ring at the base of the shaft (where our bell has the tiger) for passing a strap, and on our bell the strap has evidently been passed under the neck of the tiger. This animal stands with the body half raised against the shaft, with the clawed paws pressing against it, but it turns the upper body and neck backward and bites its own tail, thus completing the loop necessary for the suspension. Its shoulder line and hindquarters are emphasized by big, comma-shaped spirals.

The décor of this bell is very complicated. On the shaft there are three décor belts and one bulky, patterned ring. The topmost belt must be seen from above: if the photograph (Plate 82) is inverted, a *t'ao-t'ie* can be seen, the eyes and broad, rolled-up nose easily recognizable. The following two belts have dragons alternately turned upward and downward; each dragon has the shape in our figure 64, and the end of its tail stretches across the neck of the next dragon. On the bulbous ring there is a loosely twined cord pattern (common in the Huai style) and interlaced lines. On the top surface of the bell there are rolled-up dragons, their bodies being bands filled with volutes with triangles. On the outer surface of the bell, in the two belts between the spikes, there are dragons of the type shown in Plate 84, upper half, interpreted in our figure 65; they are placed alternately upward and downward.

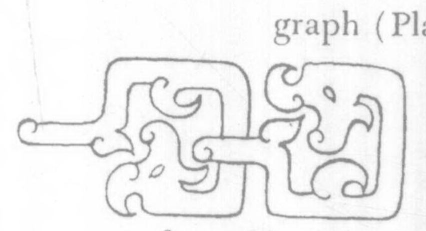


figure 64

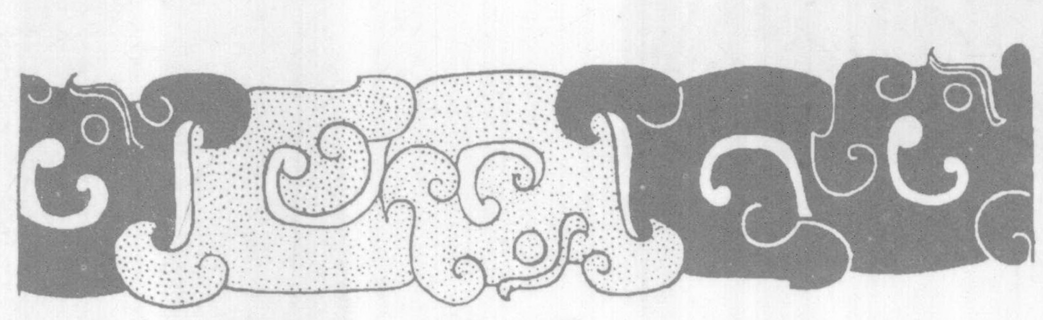


figure 65

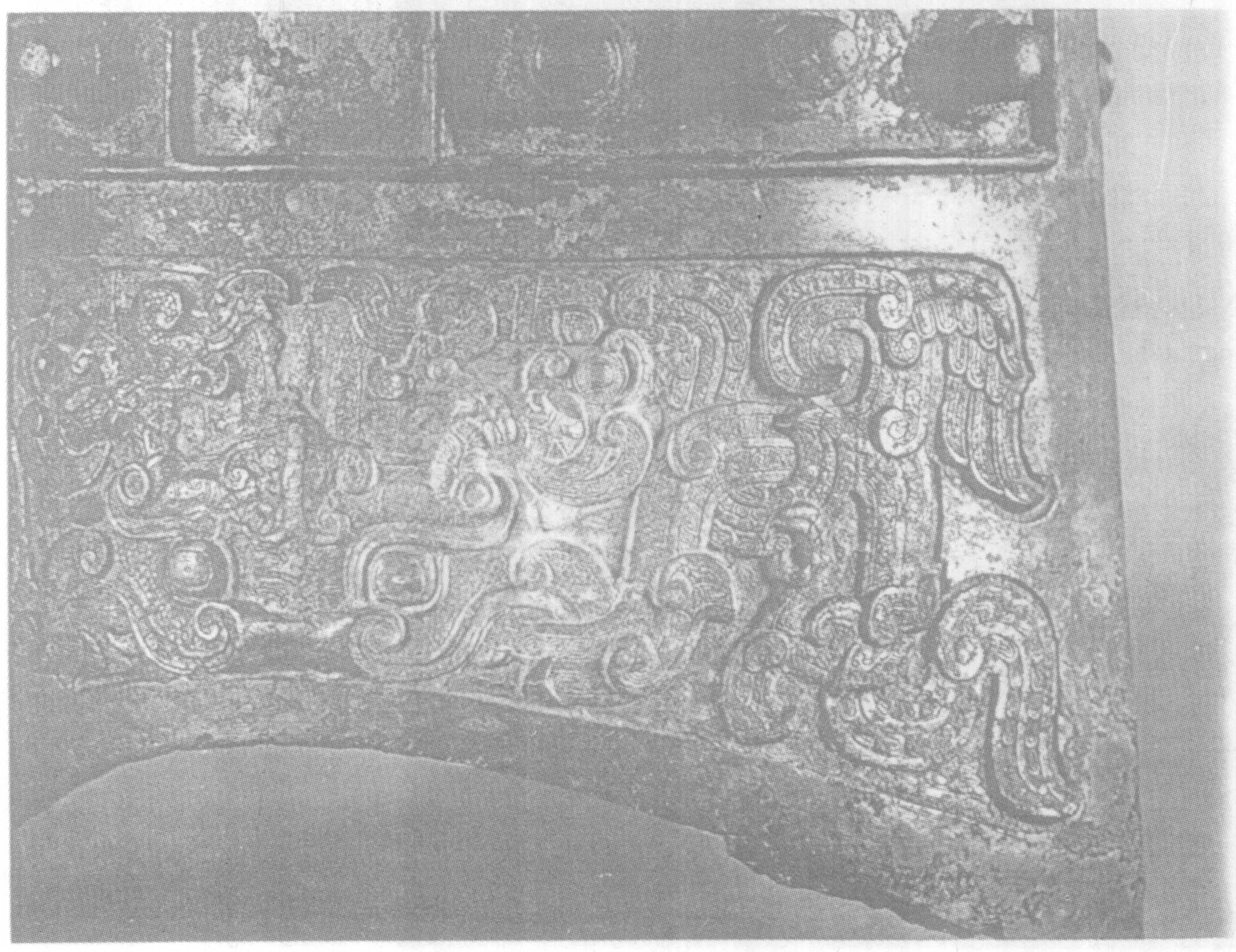
The décor field on the lower part of the bell is a magnificent specimen of gaudy Huai décor. A *t'ao-t'ie* in the center, with broad, rolled-up nose and an extra rudimentary *t'ao-t'ie* face on the forehead (nostrils, nose ridge, and horns; cf. the preceding bell), has S-shaped eyebrows which hide the first part of the big horns in recumbent C-shape. The mouth bites on the body of a dragon; see our figure 66. Some surfaces of the *t'ao-t'ie* face are filled with granulations. The dragon seen in the same figure and also, simplified (minus the crest), in figure 67 is a bird-dragon. Its big, hooked beak is turned downward, and it has a large, S-shaped crest and heart-shaped horn. Its shoulder and wing are in a higher relief plan than the body; its clawed foot grips the horn of the *t'ao-t'ie*. Its body passes behind the *t'ao-t'ie*, reappears in the latter's jaw, and goes out in a bold S-turn; branching off from this, there is an upright strand, with wing. The main trunk, when approaching the lower corner of our picture, emits a hind leg, which is lifted, the

NUMBER 59 PLATE 82









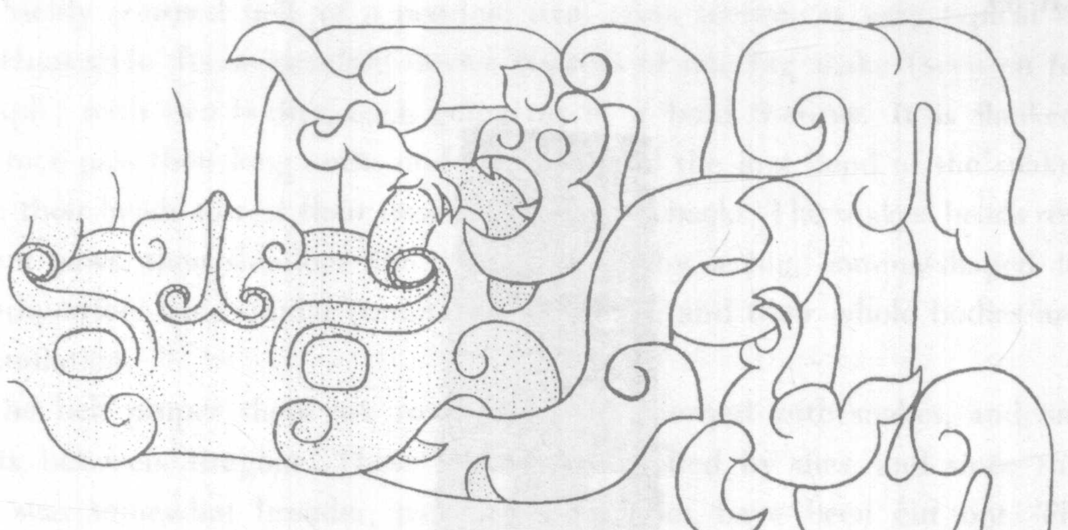


figure 66

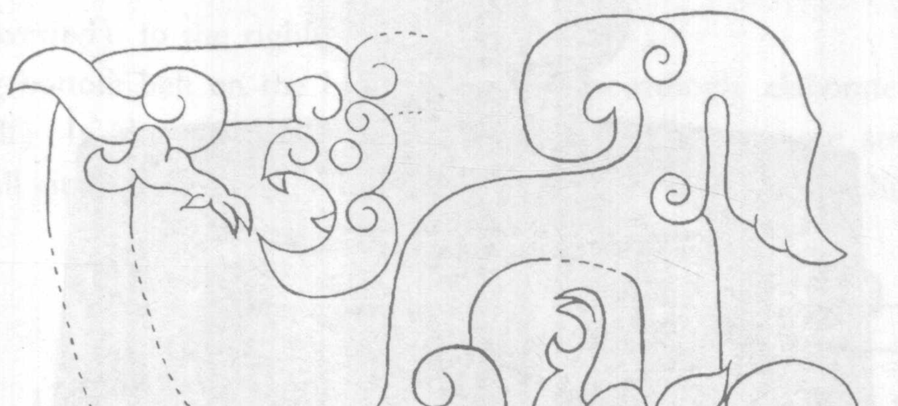


figure 67

clawed foot gripping the end of the head crest. The body of this long bird-dragon is filled with a pattern of running spirals; the head and the accessories to the body (tufts) are adorned with scales, volutes with triangles, and granulation. Altogether, the whole of this elaborate décor scheme is carried through with supreme skill and consistency.

Huai style period. HEIGHT: 23 inches. PATINA: green and blue-green. PUBLISHED: Bull. Minn., 34:18; Menzies, Plate 26.

NUMBER 60. *Bell, Chung.* PLATE 85

This fairly small bell, with a pointed, oval cross section and a straight bottom line, has a simple suspending device: a plain band carried on the heads of two head-turning tigers. The décor is likewise simple: granulation on these tigers and on the coiled snakes on the bosses. For the rest, on all the decorated surfaces (including the top surface) there are interlaced snakes (with wartlike studs in meeting points), the bodies of which are formed by four parallel relief threads.

Huai style period. HEIGHT: 6 1/4 inches. PATINA: green-blue. PUBLISHED: Bull. Minn., 28:22; Davidson, Plate 13.

NUMBER 61. *Small hand bell.* PLATE 86

The bottle-shaped top of the shaft is very unusual. The cross section of the bell is a pointed oval, and the bottom line is arched. The *t'ao-t'ie* mask has to be seen from above (the photograph held inverted). The décor field, which is filled with granulation, shows a variation of the theme "volute with angle"; every two such figures combine into larger compounds, and the whole results in a lozenge pattern. The border pattern is in part (at the top) the running spiral pattern, in part playfully dissolved dragon figures, and, at the lower corner, gracefully drawn birds with S- or heart-shaped horns.

Huai style period. HEIGHT: 8 5/8 inches. WIDTH: 3 inches. PATINA: brownish-green with brighter green patches. PUBLISHED: Bull. Minn., 37:14.

NUMBER 60 PLATE 85



NUMBER 62. *Toilet box, Lien.* PLATE 87

This vessel, with three small feet in the shape of bears, with ring handles on the sides and lid, and, on the latter, three birds in the round (exceedingly reduced and stylized), is gilt, and the décor patterns are produced in incised lines. In the neck and foot belts there is the "triple lozenge" figure, which is common on Huai style mirrors but which continued to be a favorite pattern all through the Han era, particularly on textiles, e.g., on the Noin Ula textiles. The figure originally derived (through the breaking of straight lines into hooked ones) from a variety of the "interlocked T's" pattern (cf. our vessel 2); see in detail BMFEA, 13:30. Our figure 68 will show this briefly.

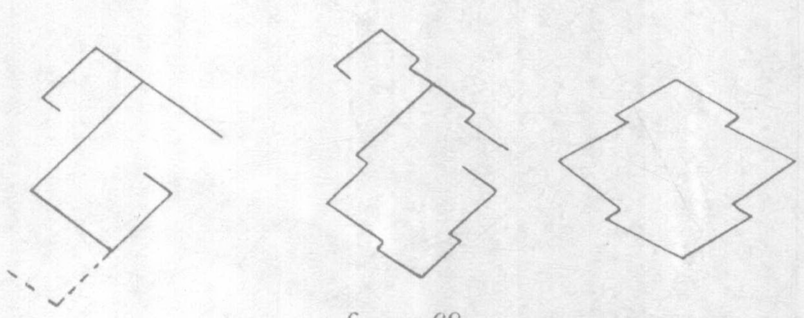


figure 68

The scene on the principal surface shows hills and clouds and various animals, all in a very free composition; there is nothing left of the ancient demand for symmetry here. The long, sweeping lines are adorned with what has been termed the "Han curl border" (for documentation see BMFEA, 13:97, 98).

Han. HEIGHT: 7 1/4 inches. DIAMETER: 6 7/8 inches. PATINA: light green at feet and on lid animals.

NUMBER 61 PLATE 86



NUMBER 62 PLATE 87



NUMBER 63. *Pole socket.* PLATES 88 AND 89

The décor on this remarkable specimen, executed in high, rounded relief and partly in the round, consists of two elements. First, there is a highly elaborate water buffalo, the head quite realistically shaped, and a double body on the shield above (only one is visible in our photograph). The front leg is folded in under the body; the hoofs are quite natural, but on the body the traditional filling of the surfaces with spiral lines and hooks weakens the effect of the otherwise fairly naturalistic representation. Second, on each side of the cylinder (which has an oval cross section), there is a creature, lying prostrate on knees and elbows, with a human head but finlike hands and feet. The curvatures of the body are strongly reminiscent of those on our vessel 8 above. The rump is adorned with a whorl circle, the chignon with another variety of the same motif (a number of round dots encircling a central one), which we discussed under vessel 54. Along the back are "tufts" of the same kind as those we have found to be ubiquitous on dragons; a similar tuft proceeds from the bend of the knee. Possibly the figure represents a water demon(?).

Yin or Early Chou. HEIGHT: 8 1/2 inches. WIDTH: 4 1/4 inches. PATINA: green. PUBLISHED: Waterbury, Plate 31.

NUMBER 63 PLATE 88



NUMBER 63 PLATE 89



NUMBER 64. *Pole top.* PLATE 90

We have here an eccentric combination of four masks. On one side there is at the top a forceful *t'ao-t'ie* head, having big horns of the recumbent C type, with borders adorned by alternating straight and T-shaped scores. The *t'ao-t'ie* bites on a human head, which has the broad nose so typical of many early masks. Cf., for instance, the famous vessel in the Sumitomo collection, *Senoku*, 2:68. On the other side, a ram's head with turned-down horns bites in a similar way on a head which resembles, in the main, a *t'ao-t'ie*, but which has, instead of the ordinary ridge (flange) in the central line, a raised elephant trunk. This is a most unusual and remarkable composition and a powerful specimen of early Chinese sculpture.

Yin or Early Chou. HEIGHT: 6 inches. PATINA: green. PUBLISHED: Bull. Minn., 26:33; *Parnassus*, Nov. 1938, p. 22.

PLATE 90



NUMBER 90

NUMBERS 65 AND 66. *Pole tops* WITH ANIMALS. PLATE 91

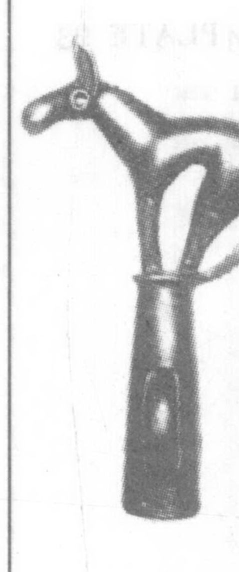


figure 69

The pose of these animals and the treatment of their details – the tense, straight legs, converging to balance on a small surface, the slender bodies, the line of the necks very nearly continuing directly that of the front legs – are strikingly similar to those often obtaining in the Nomad animal style of the North. Even the curious detail of the tail in the animal to the right has a direct Ordos counterpart; cf. our figure 69, an Ordos pole top in the Museum of Far Eastern Antiquities, Stockholm. It would be tempting to define our specimens here as likewise products of the steppe culture. But in fact the patina is the well-known An-yang (Honan) patina (exceedingly unlike that of the objects coming from the steppe), the shapes of the pole tops are well known from Yin and Early Chou specimens, and since we have witnessed, in recent years, how a whole series of style elements typical of the Nomad art crop up among the An-yang finds dating from the second millennium B.C. (see BMFEA, 17:101 ff.), there should be no hesitation in assigning them to the An-yang culture or its immediate aftermath.

Yin or Early Chou. HEIGHT: 7 1/2 inches and 5 3/4 inches. PATINA: blue-green. PUBLISHED: Bull. Minn., 36:33.

NUMBERS 65 AND 66

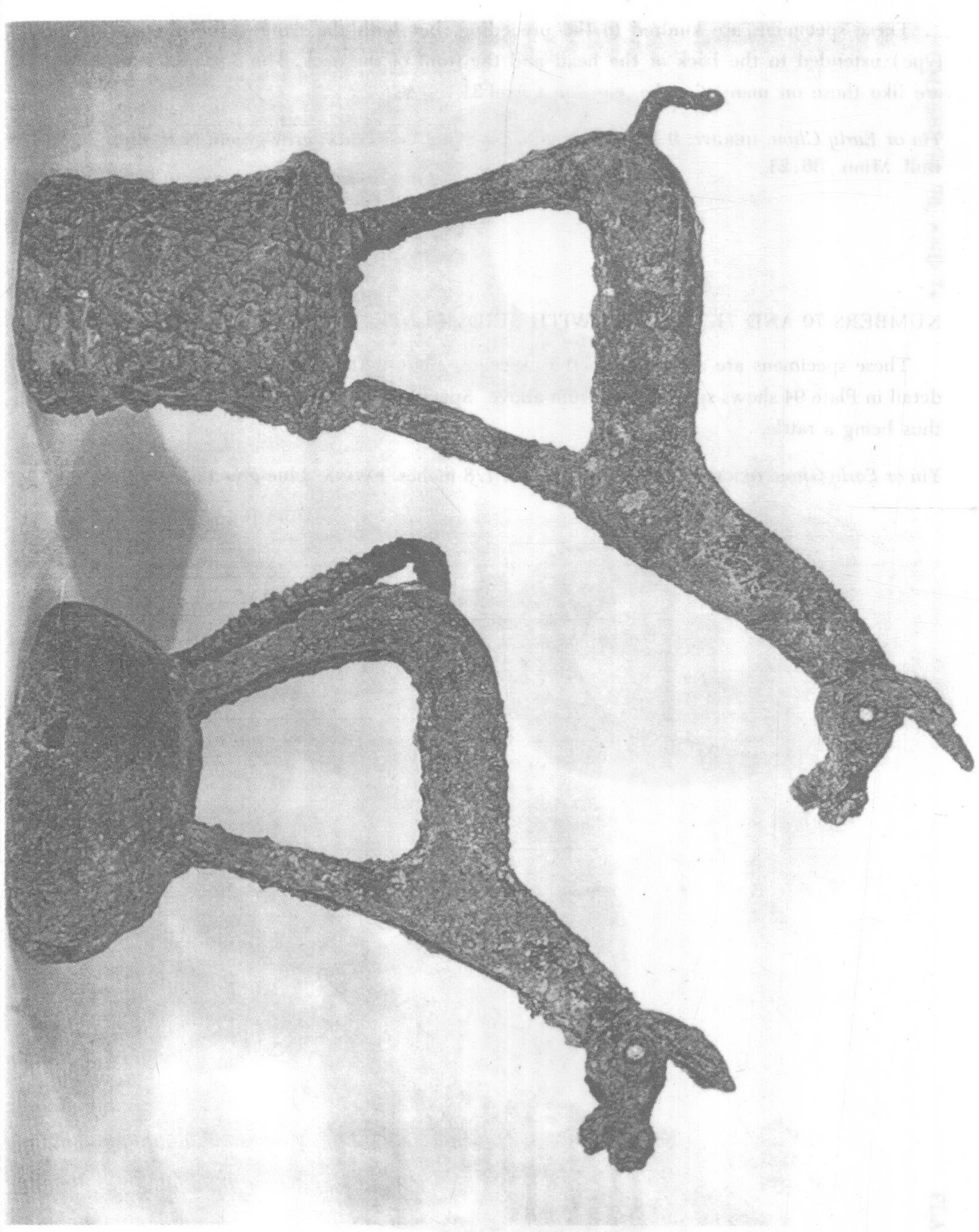


PLATE 91

NUMBER 67. *Bird* ON DOMED BASE. PLATE 92

It is entirely obscure what purpose this object has served. There is a rectangular "handle" to the base; the openwork suggests that the bird has been a rattle, and this is supported by the fact that specimen 68 below is really a rattle, having a pellet inside. The whorl circle on the base, the horns and crest on the head, and the flange with T-shaped scores along the back, clearly indicate an early period.

Yin or Early Chou. HEIGHT: 5 1/2 inches. PATINA: green.

NUMBER 67 PLATE 92



NUMBERS 68 AND 69. *Pole tops* WITH BIRDS. PLATES 93 AND 94, LEFT HALF

These specimens are kindred to the preceding, but with the flanges (of the early type) extended to the back of the head and the front of the neck. The S-shaped horns are like those on many *t'ao-t'ie*, e.g., on vessel 31.

Yin or Early Chou. HEIGHT: 9 1/2 inches and 7 5/8 inches. PATINA: grey-green. PUBLISHED: Bull. Minn., 36:23.

NUMBERS 70 AND 71. *Pole tops* WITH BIRDS. PLATES 95 AND 94, RIGHT HALF

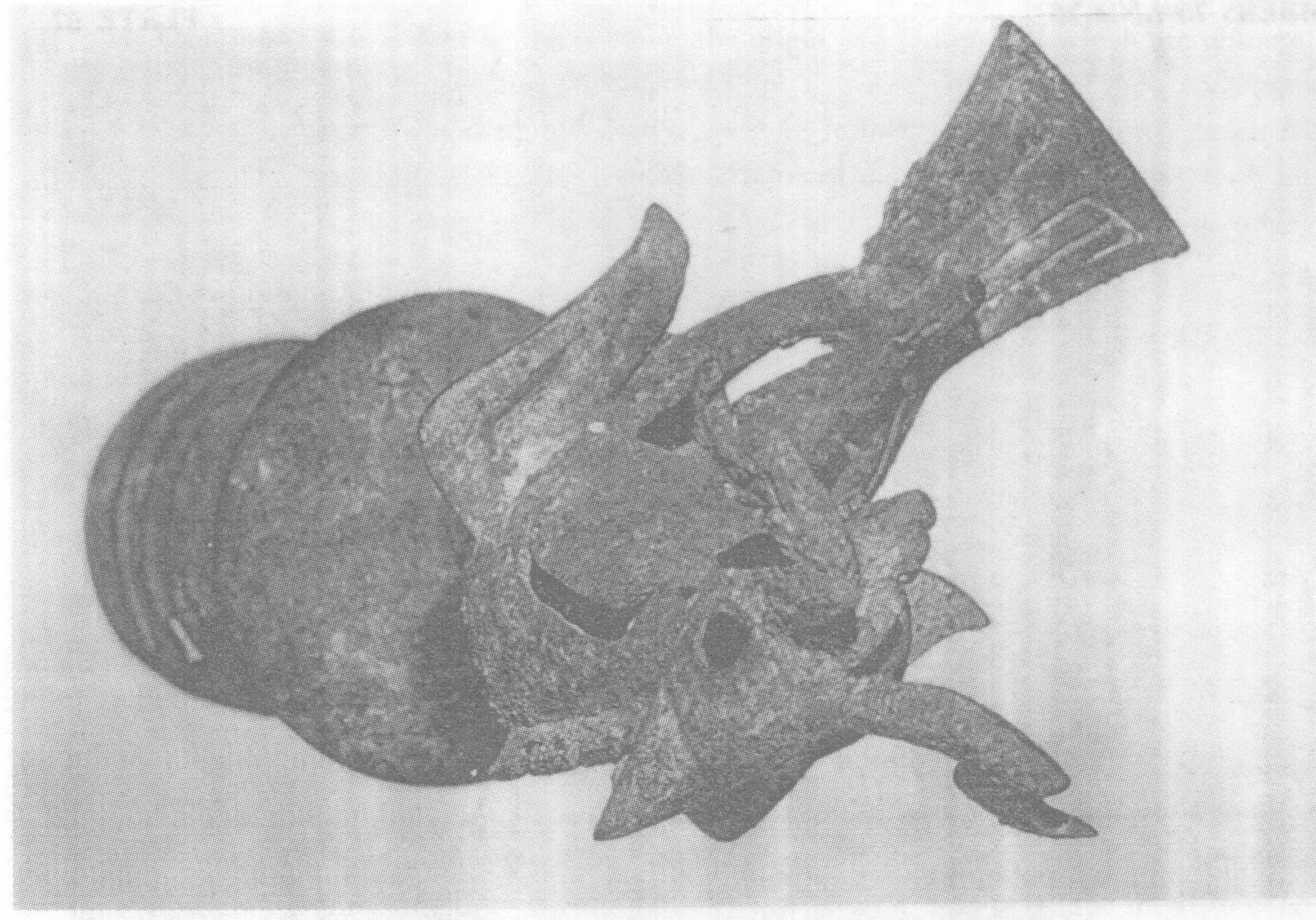
These specimens are analogous to the preceding, but with simpler adornment. The detail in Plate 94 shows specimen 71 from above. Specimen 70 has a pellet in the body, thus being a rattle.

Yin or Early Chou. HEIGHT: 9 3/16 inches and 6 7/8 inches. PATINA: blue-green.

NUMBERS 68 AND 69 PLATE 93







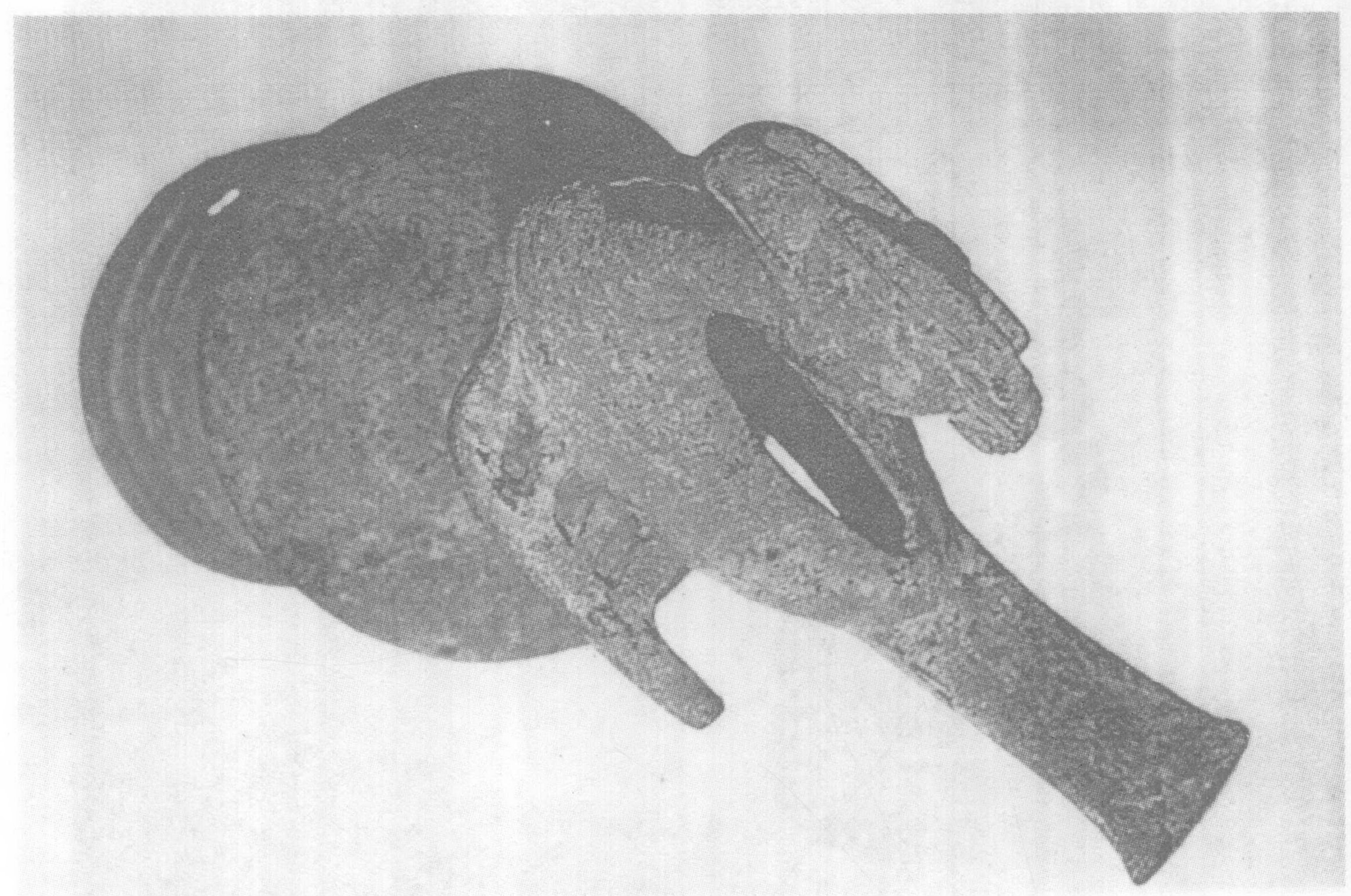


PLATE 94



PLATE 96

NUMBERS 72, 73, AND 74. *Appliqués* AND *Pole top.* PLATE 96

Numbers 72 and 74 are appliqués and number 73 is a pole top. Numbers 72 and 73 are in the form of bovine heads (with the forehead lozenge of a *t'ao-t'ie*. Number 74 is an ordinary *t'ao-t'ie* mask with remnants of turquoise inlay.

Yin or Early Chou. HEIGHT: 3 3/8, 6 3/8, 2 5/8 inches respectively. PATINA: green.

NUMBER 75. *Libation ladle.* PLATE 97, LEFT HALF

The handle divides up into three sections, the first with a very summary *t'ao-t'ie* mask, the second with a plain central ridge bordered by lozenge-adorned fields, the third a combination of animals. The bottom animal is a dragon with bottle horn and a body which bends violently and rises vertically with a leg and a claw to the left; toward the end it cleaves, one strand curling out into an ordinary tail, the other half running on and ending in a new dragon head. This dragon head has a big crest falling down along the back, and the crest takes the shape of a bird (to be seen with the photograph held inverted), with a big, V-shaped horn and a small crest which connects with the forehead of the first dragon; altogether a very elaborate and ingenious composition. The dragon body is adorned with a row of scales and with alternating straight and T-shaped scores (like a flange).

Yin or Early Chou. LENGTH: 8 1/2 inches. PATINA: green.

NUMBER 76. *Libation implement,* FOR STIRRING WINE?
PLATE 97, RIGHT HALF

The handle has, in openwork, a combination of animal motifs which is highly complicated. In the first place, the whole handle forms a beaked head with the rod as a body, the latter having, close to the handle, a leg with tuft and claw which reaches and

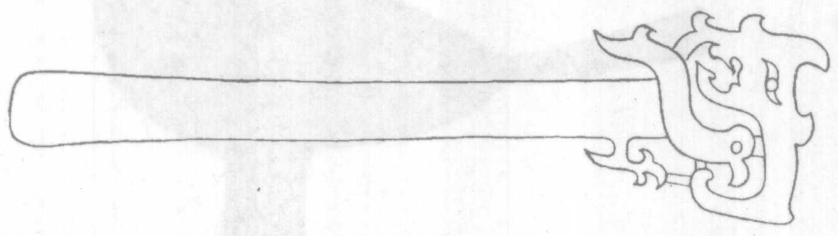
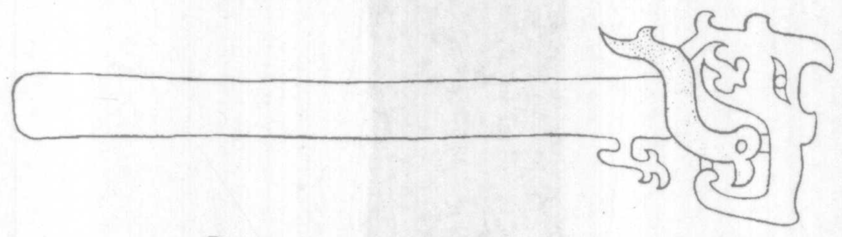


figure 70

figure 71



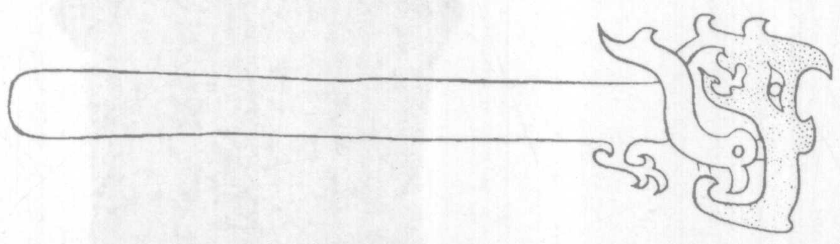


figure 72

touches the beak (figure 70). For this composition, cf. the frequently occurring ritual dagger-axes, e.g., Plate 99 below. In the second place, the handle divides up into one bird (see figure 71), whose crest supports the belly of a dragon (see figure 72). This dragon turns its head to the left, and the teeth can be seen in its open mouth.

Yin or Early Chou. LENGTH: 6 1/8 inches. PATINA: green.

NUMBERS 75 AND 76 PLATE 97



NUMBER 77. *Tube.* PLATE 98

The décor of this specimen is gaping dragons on a spiral ground. Observe the interesting shape of the horn – a form later revived in the Huai style ("volute with triangle") and there exceedingly frequent.

Yin or Early Chou. LENGTH: 8 inches. DIAMETER: 1 3/16 inches. PATINA: green.

NUMBERS 78 AND 79. *Wheel-axle caps.* PLATE 98

The décor of these caps is blades and, near the base, a broad belt with dragons. The ground is of squared spirals. There is a cap exceedingly like our specimen 78 in Eumorfopoulos Cat., 2:65.

Yin or Early Chou. LENGTH: 7 1/4 and 7 inches. PATINA: green.

NUMBERS 77, 78, AND 79 PLATE 98



NUMBERS 80, 81, AND 82. *Dagger-axes, Kuo.* PLATE 99

On number 80 one of the lugs has been broken off. Its tang, with a dragon figure which has been inlaid, has a dent in the contour, the origin and meaning of which are obscure. The type is common (e.g., Huang, *Ye Chung*, Vol. 2, hia 14, with several specimens from An-yang). Numbers 81 and 82 both have the tang formed as a crested bird's head. As fully developed in BMFEA, 17:136, the thin, flat ritual dagger-axe of this type, with an asymmetrically placed tang and an animal's head bending over to one side, has its origin in a profane knife with an animal's head (figure 73; the knife was excavated at An-yang

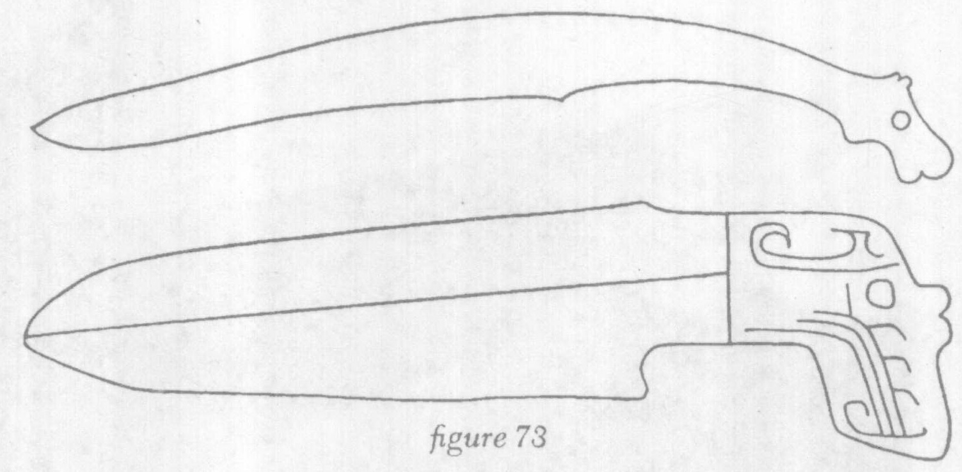
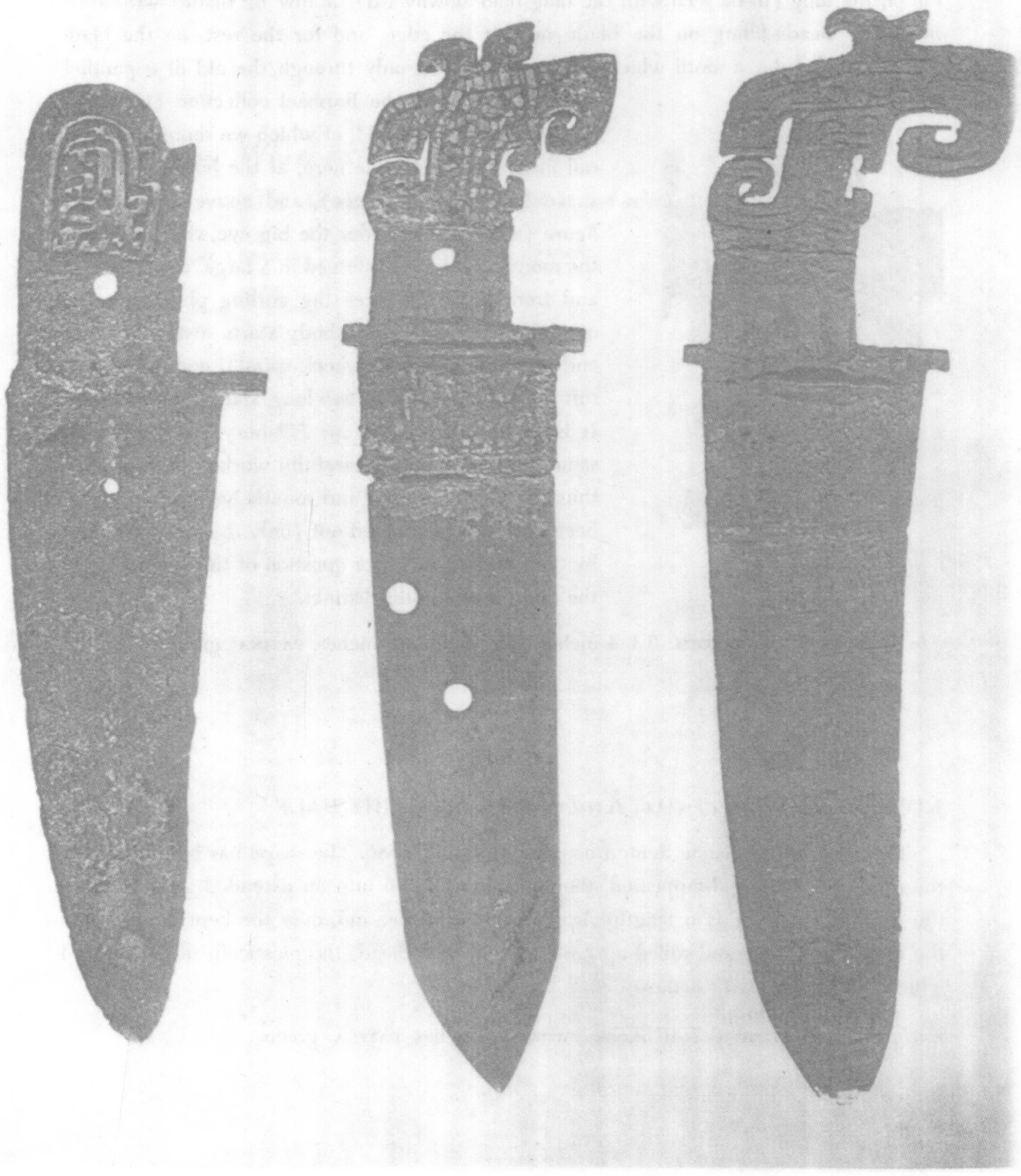


figure 73

by the Academia Sinica; the dagger-axe, from An-yang, belongs to MFEA). The profane knife has been translated into a ritual dagger-axe, and soon its head has been tampered with and turned into the beaked and crested head of a bird (the motif so common in Yin art). Specimen 81 is inlaid with turquoise, both on the tang and on the socket, into which latter has been fitted a blade of jade. The meaning of the two holes in this blade is entirely obscure.

Yin or Early Chou. LENGTH: 9 9 16, 10 3 4, and 11 inches respectively. PATINA: green.

NUMBERS 80, 81, AND 82 PLATE 99



NUMBER 83. *Dagger-axe, Kuo.* PLATE 100, LEFT HALF

Here the tang still retains the shape derived from the original animal's head (see the preceding figure 73); but its meaning has been entirely forgotten, and the space has been filled with a dragon, which turns the head toward the blade. This dragon is almost entirely dissolved, but the eye and the curled tail are still clearly discernible. On the blade (with point held downward) we can see, close to the lugs, a *t'ao-t'ie* mask which, though likewise strongly dissolved, is still discernible (observe the C-shaped horn in the upper right corner).

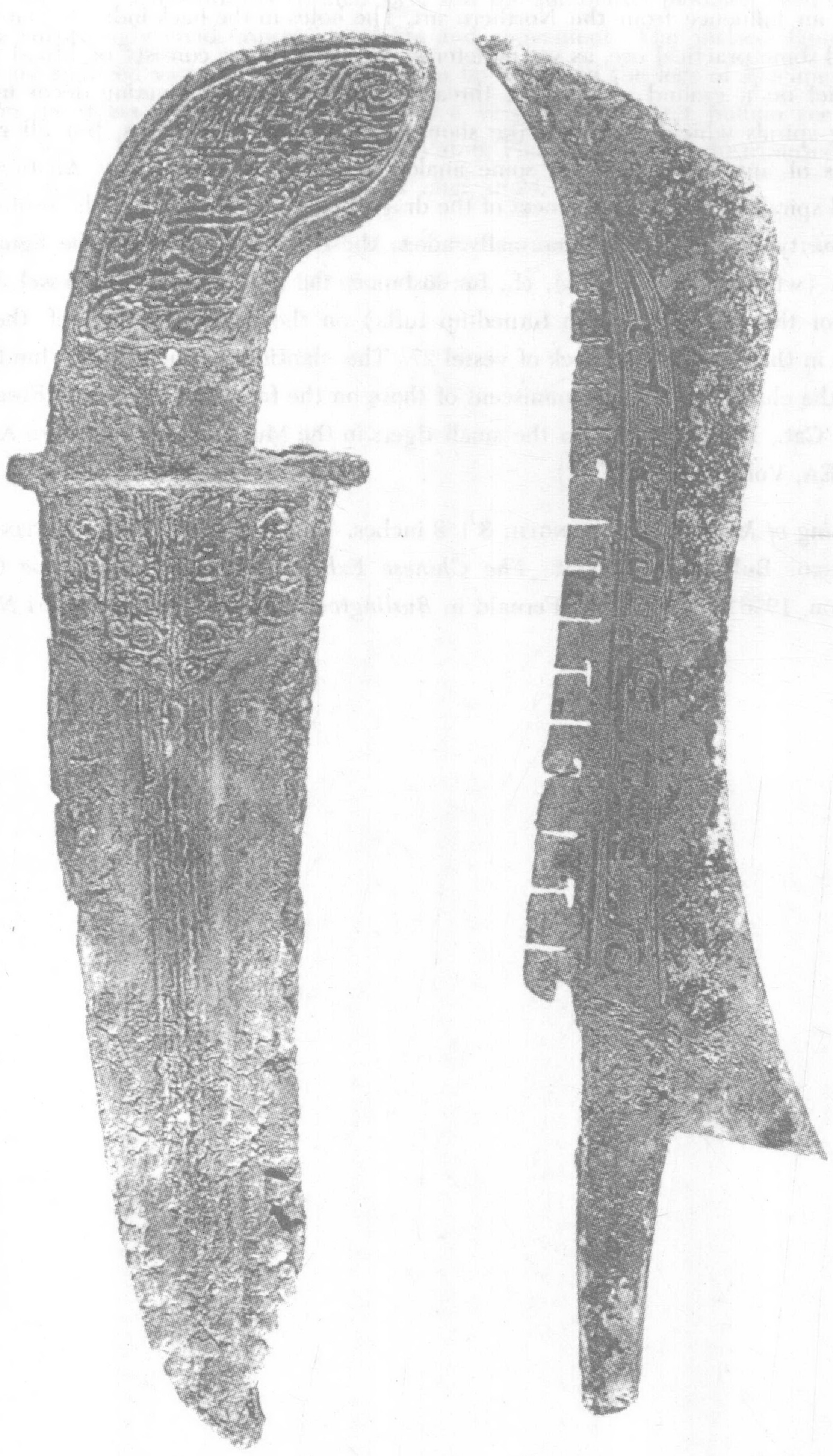
Yin or Early Chou. LENGTH: 17 inches. PATINA: green.

NUMBER 84. *Sacrificial knife.* PLATE 100, RIGHT HALF

Knives of this type are well known among the finds at An-yang. Along the back of the knife there is a flange with alternating straight and T-shaped scores, as on ritual vessels. The narrow décor band shows, on a ground of squared spirals, head-turning dragons with bottle horns in low relief.

Yin or Early Chou. LENGTH: 16 1/2 inches. WIDTH: 3 1 2 inches. PATINA: green.

NUMBERS 83 AND 84 PLATE 100



NUMBER 85. *Ritual axe.* PLATE 101, LEFT HALF

This axe, with its crescent-shaped blade, has on the one hand a real shaft hole (tube) of oval cross section, on the other hand a lug protruding on the opposite side. From the tube and the lug to the points of the blade there are two decorative dragons in openwork, with turned heads, S-shaped horns, and scales on the bodies. The décor is a *t'ao-t'ie* on the tang (to be seen with the tang held downward), a row of blades with rudiments of cicada-filling on the blade nearest the edge, and for the rest, on the blade and the shaft tube, a motif which can be understood only through the aid of a parallel, an axe formerly in the Raphael collection (Umehara, *Seikwa*, Vol. 7, Plate 98), of which we reproduce a detail in figure 74. We see here, at the bottom, a coiled snake (head seen *en face*), and above this a weird figure (a demon?). Under the big eye, the nostril and the mouth line have coalesced in a large, recumbent C, and from the head three big curling plumes run up onto the shaft tube. The body starts just behind the end of the mouth line (cheek spiral), goes down in a soft S-bend, and ends in two long, sharp-pointed claws. It is quite evident that our Pillsbury axe repeats the same motif, but is less carefully worked in the detail; thus the C-line of nose and mouth below the eye has been unduly straightened out (only the ends revealing, by their curls, that it is a question of this feature), and the body is much less distinct.

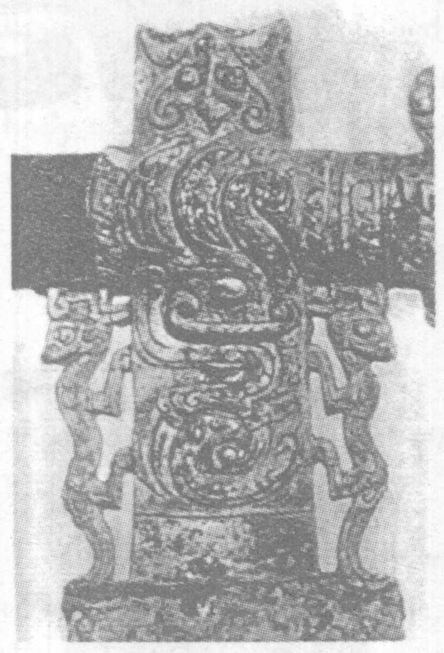


figure 74

Yin or Early Chou. LENGTH: 6 1/4 inches. WIDTH: 3 9/16 inches. PATINA: green.

NUMBER 86. *Dagger-axe, Kuo.* PLATE 101, RIGHT HALF

The tang has the same dented contour as specimen 80. The shape has been modified, the upper lug having disappeared, the lower lengthened into an extended support along the shaft. The décor is a lengthy leaf along the blade, and, over the bent base of this, the upper part (eye and rolled-up nose) of a dragon head, the plastically lifted horn of which is decorated with snakes.

Early Chou. LENGTH: 8 7/16 inches. WIDTH: 4 inches. PATINA: green.



NUMBER 87. *Ox (water buffalo?),* RECUMBENT. PLATES 102 AND 103

This fine sculpture has the pose, legs folded in under the body and head turned sidewise, so typical of the Northern Nomad style (cf. vessels 46 and 47), and is probably due to an influence from the Northern art. The holes in the back indicate that the piece has had some practical use, as yet undetermined. The décor consists of broad bands in flat relief on a ground of discreet, threadlike spirals. The dominating décor figures are the big spirals which emphasize the shoulder and the hindquarters, but all remaining surfaces of any extension have some analogous spirals as mere filling. All these broad-banded spirals evince reminiscences of the dragon décor of earlier periods insofar as they have the typical tufts which normally adorn the dragon figures. For the figure on the haunch (with turned-up tufts), cf., for instance, the dragon body on vessel 35 (podium); for the big spiral (with turned-up tufts) on the flank of the ox, cf. the stylized dragon in the blade on the neck of vessel 27. The slanting figures on the hind leg and under the chin are strongly reminiscent of those on the famous tigers in the Freer Gallery (Freer Cat., Plate 26) and on the small tigers in the Museum of Far Eastern Antiquities (BMFEA, Vol. 20, Plate 27, 2).

Beginning of Middle Chou. LENGTH: 8 1/8 inches. HEIGHT: 4 1/2 inches. PATINA: green. PUBLISHED: Bull. Minn., 26:33; *The Chinese Exhibition, a Commemorative Catalogue* (London, 1936), Plate 17; H. Fernald in *Burlington Magazine*, Jan. 1936; *Art News*, Oct. 1938.



NUMBER 88. *Wheel-axle caps,* A PAIR. PLATE 104

The outer part is decorated with a wavy band, inside which is a figure of cicada origin. The linch-pin top is formed as an animal's head, with spiral horns and a slot at the back through which a strap may have passed.

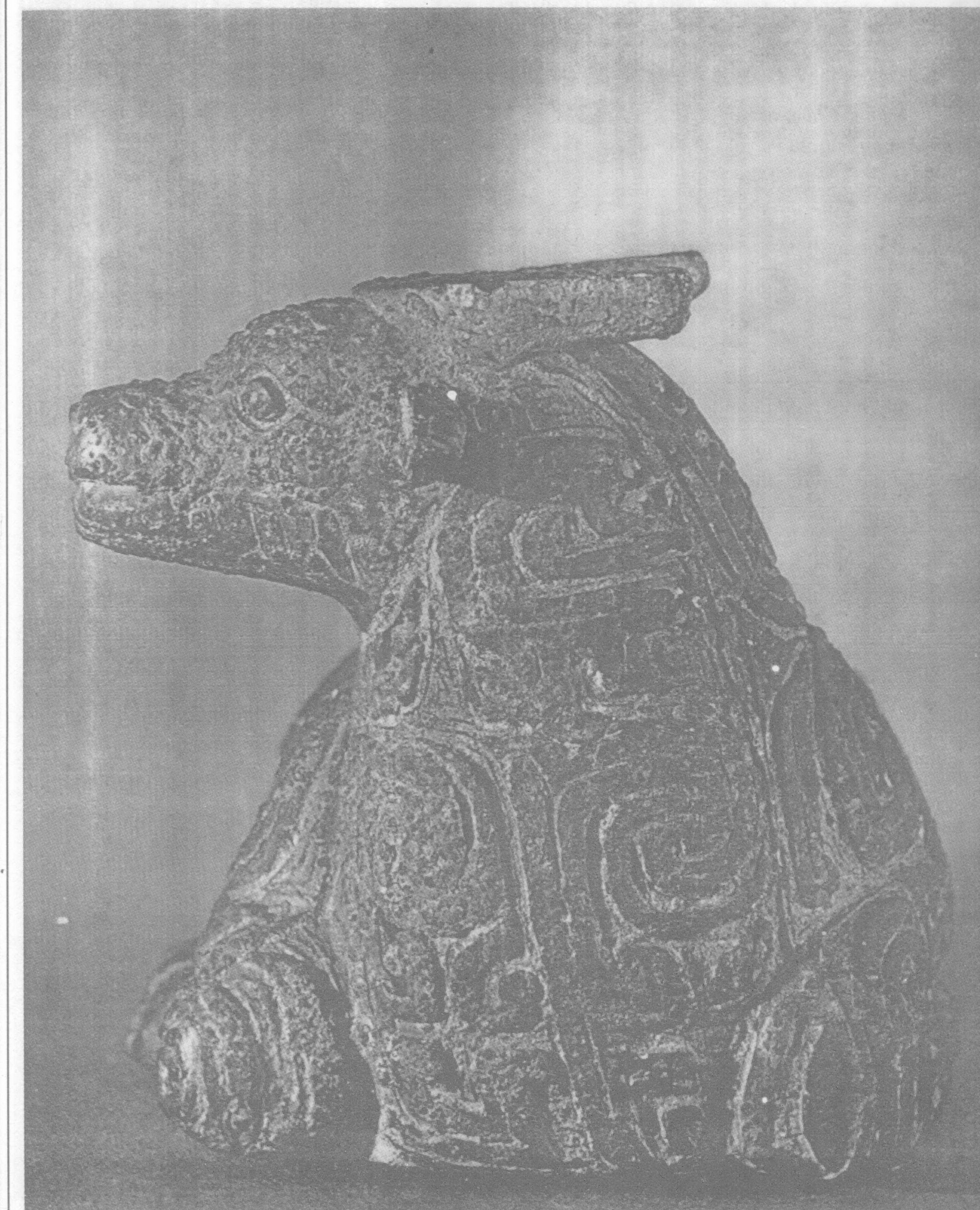
Middle Chou. LENGTH: 6 1/6 inches. HEIGHT AT PIN: 3 3/4 inches. PATINA: grey-green.

NUMBER 89. *Wheel-axle cap.* PLATE 104

The outer part is decorated with a dragon in flat relief; farther in, a scale band.

Middle Chou. LENGTH: 5 1/4 inches. PATINA: green.

NUMBER 87 PLATE 103



NUMBER 90. *Water buffalo.* PLATE 105

The socket on the back indicates that the animal has served as a podium. The heavy body, the stout, schematically formed legs, and the summarily modeled head combine to give a surprisingly vivid impression of life and movement. The incised figures on the body are reduced variants of the element to be found on the legs of specimen 87 above and on the tigers in the Freer Gallery. For a very similar water buffalo see Umehara, *Seikwa*, Vol. 6, Plate 1; also in BMFEA, Vol. 6, Plate 20 (Kunstindustrimuseum, Copenhagen); another is in Huang, *Tsun ku chai*, III.24.

Last part of Middle Chou. LENGTH: 10 1/2 inches. HEIGHT: 5 1/2 inches. PATINA: grey-green. PUBLISHED: Bull. Minn., 34:18 and 36:23.

NUMBERS 88 AND 89



PLATE 104

NUMBER 90



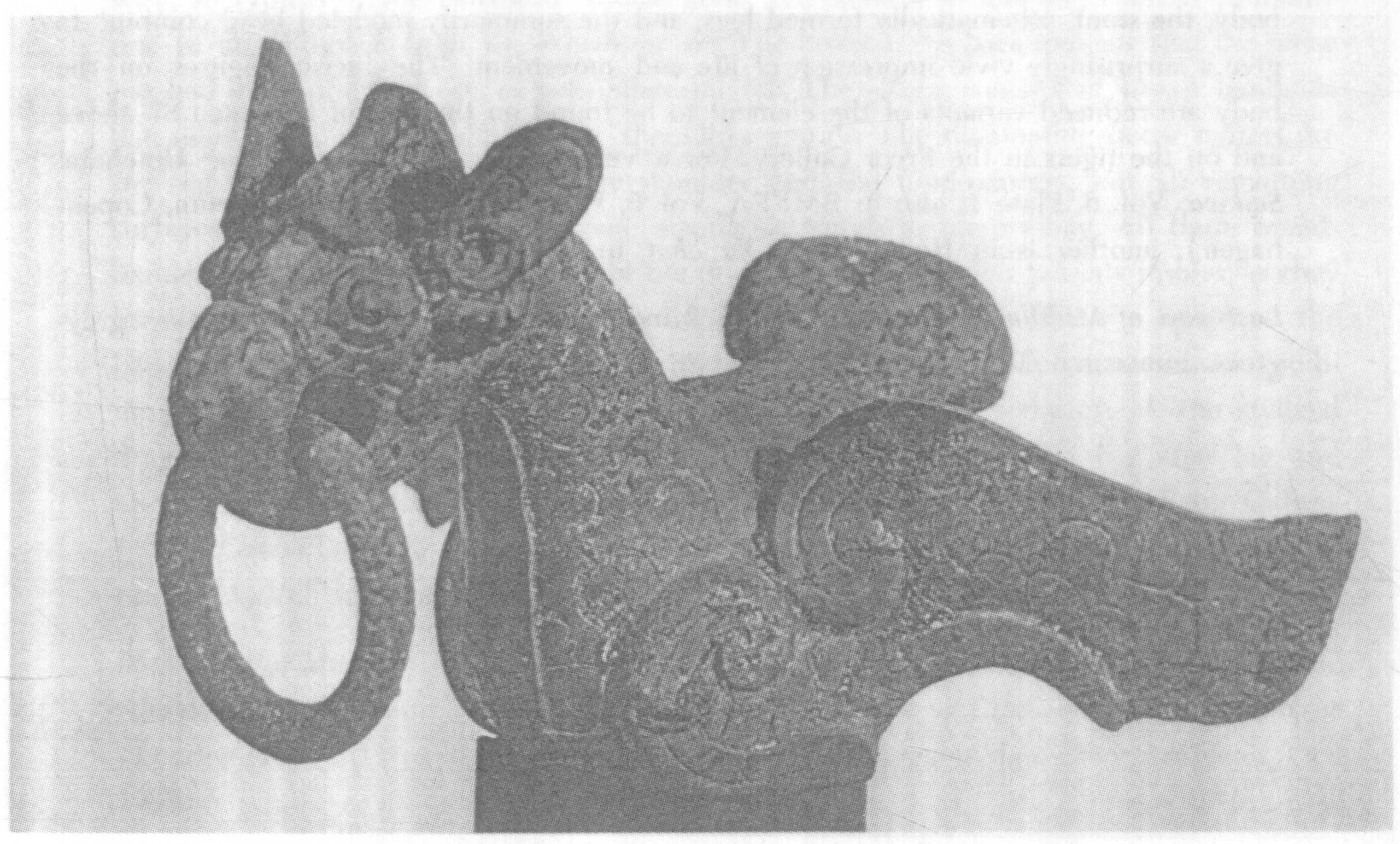
PLATE 105

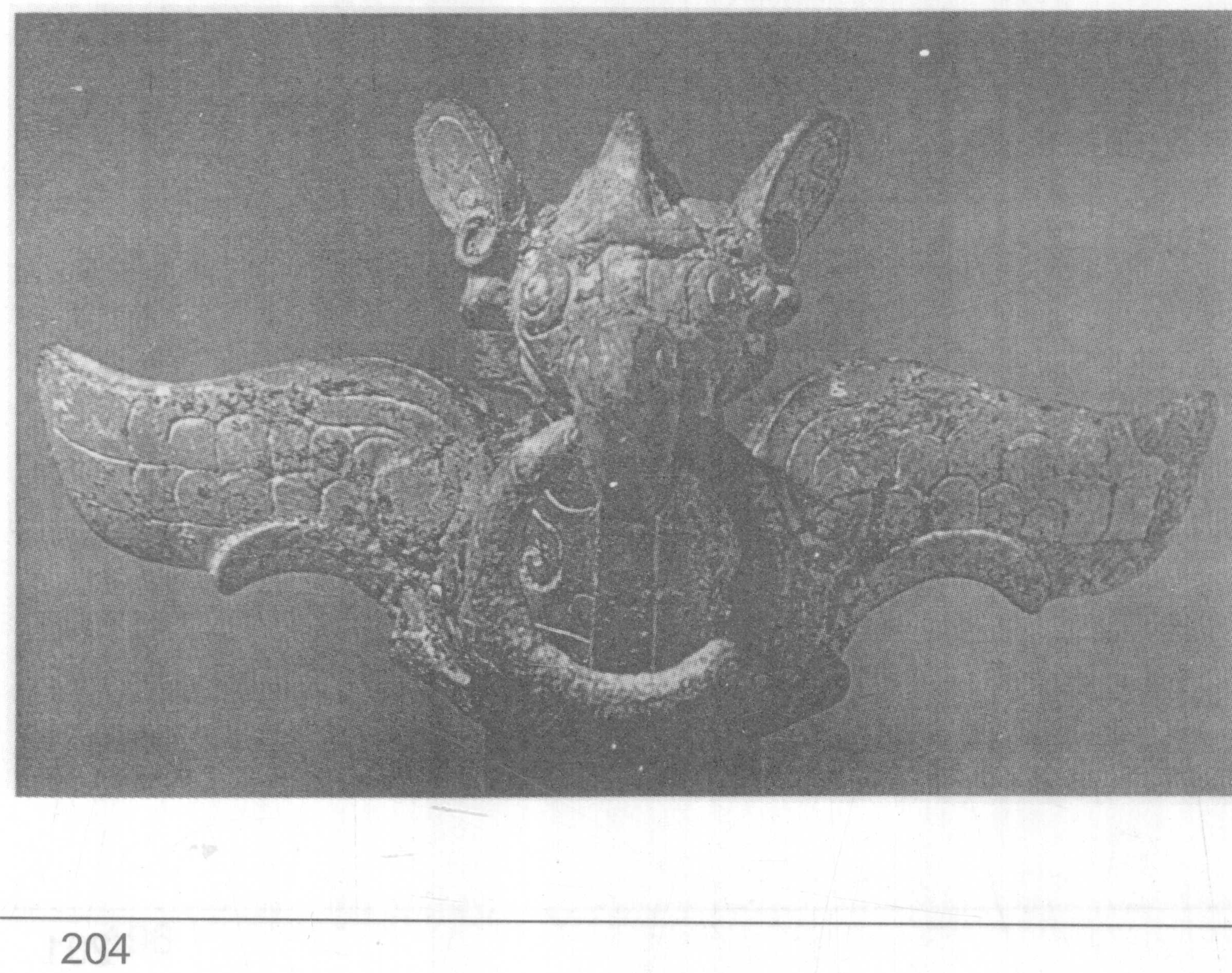
NUMBER 91. *Bird.* PLATE 106

This bird seems to have been applied to the top of some object (furniture?), since the ring in the beak is evidently a handle. The bird is a magical animal, having crest, ears, and horns. The beautifully outspread wings are adorned with rows of scales. The shoulder line is emphasized by a big comma-figure in high, rounded relief.

Middle Chou. HEIGHT: 3 1/8 inches. WIDTH: 5 5/8 inches. PATINA: green. PUBLISHED: Bull. Minn., 36:23.

NUMBER 91 PLATE 106





NUMBER 92. *Tiger.* PLATE 107

Here again the socket indicates that the specimen has served as a podium. This animal has décor figures on the body which are somewhat reminiscent of those on the leg of specimen 87 above and on the Middle Chou tigers in the Freer Gallery. The spirals emphasizing the shoulder and hindquarters are here centered by a raised ring with turquoise inlay. It would be tempting to date this animal as Middle Chou, but the treatment of certain details – viz., the rope pattern on eyes, eyebrows, part of the dragon's head (on socket), and fetlocks, and the granulation pattern on the front surface of the ears and part of the dragon's head (on socket) – indicates a slightly later date; cf. specimen 93 next.

Early part of the Huai style period. LENGTH: 11 inches. HEIGHT: 5 1/2 inches. PATINA: bluish-green. PUBLISHED: Bull. Minn., 36:23.



NUMBER 92

PLATE 107

NUMBER 93. *Beast.* PLATE 108

This animal is somewhat reminiscent in style of specimen 90, the water buffalo, but is even more broad, squat, and heavy. In fact, the sculptural effect is not concentrated on the muscle play, but on the big, sweeping curves of the body. The spirals emphasizing the shoulder and hindquarters are broad bands with a modified scale pattern (which recurs on the tail); on the shoulder, moreover, as on the preceding specimen, there is a raised ring with turquoise inlay (the eye has a similar inlay). For the rest, we find in the adornments various paraphernalia of the Huai art: the cowrie band round the neck, the rope pattern on eyebrows and front-leg tufts, granulation on the ears and the hind-leg tufts, and the end of the tail formed into a bird's head.

Huai style period. HEIGHT: 8 inches. PATINA: light green. PUBLISHED: Bull. Minn., 34:18 and 36:23.



NUMBER 94. *Winged dragons,* A PAIR. PLATE 109, UPPER HALF

The sculpture is here admirable: observe the tense carriage and proud lifting of the head, the bold line of the elastic body. The forceful comma-shapes into which the tail-ends and the various tufts have been formed and the double-rope pattern on the disk-like mustachios go to prove that, in spite of the scale pattern on the wings, we have to attribute a somewhat later date than Middle Chou to these animals.

Early part of the Huai style period. LENGTH: 8 3/16 inches. HEIGHT: 7 inches. PATINA: grey-green. PUBLISHED: Bull. Minn., 36:23.

NUMBER 95. *Birds (falcons?),* A PAIR. PLATE 109, LOWER HALF

These birds, which with an extreme simplicity combine an astounding expressiveness and life, should be compared with the dress hook (in the MFEA) in our figure 75, which has quite the same treatment of the bird's tail. This hook is undoubtedly Huai.

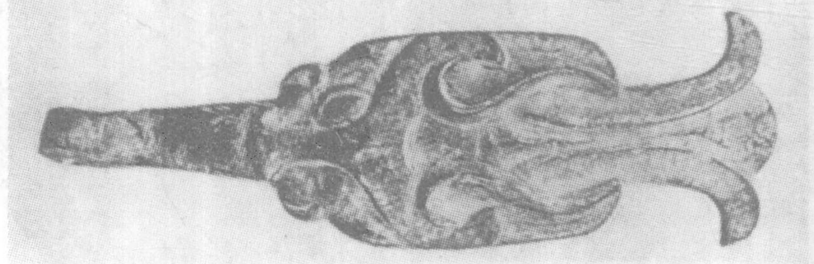


figure 75

Huai style period. HEIGHT: 1 5/8 inches. PATINA: pale green.

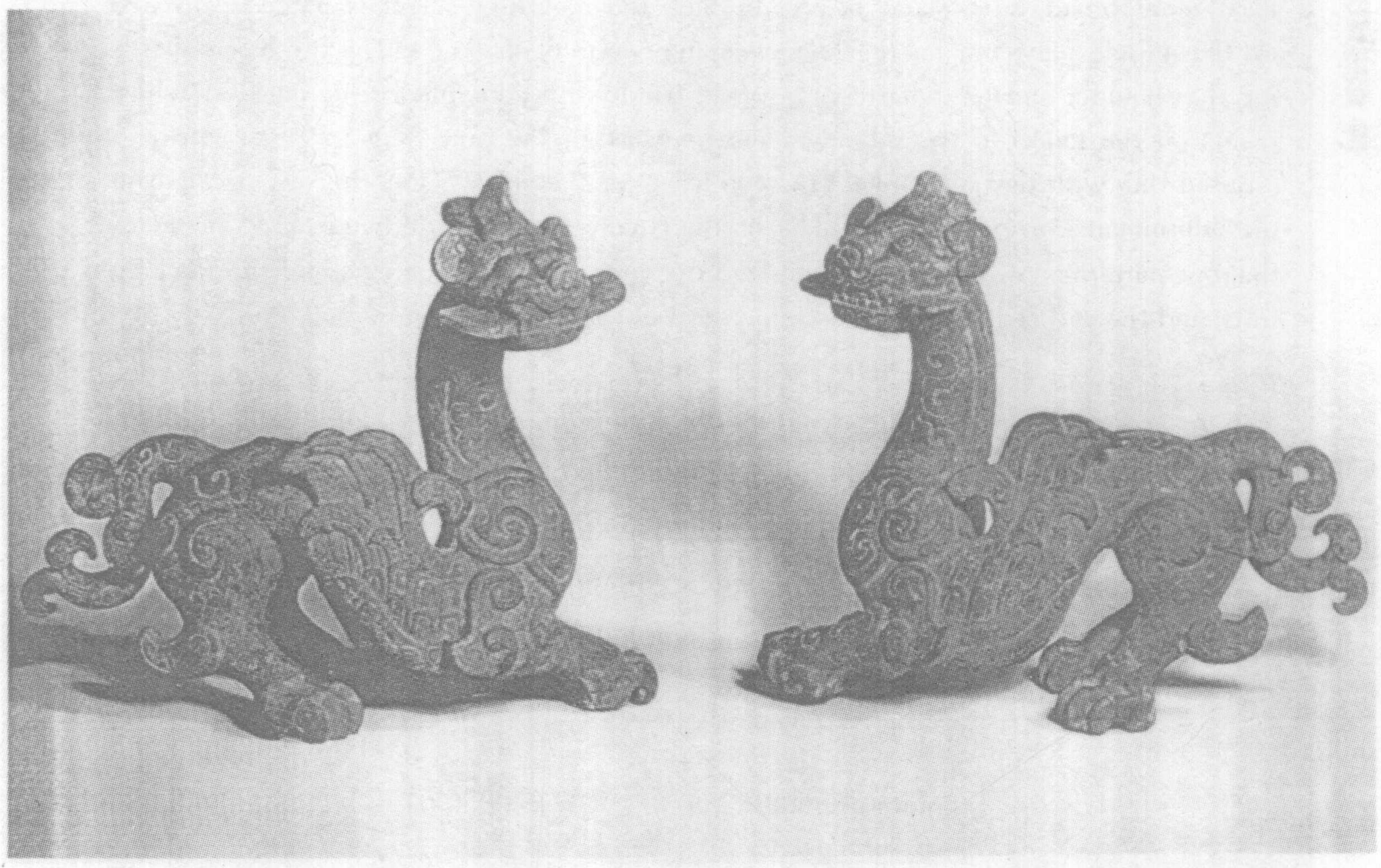
NUMBER 96. *Man.* PLATES 110 AND 111

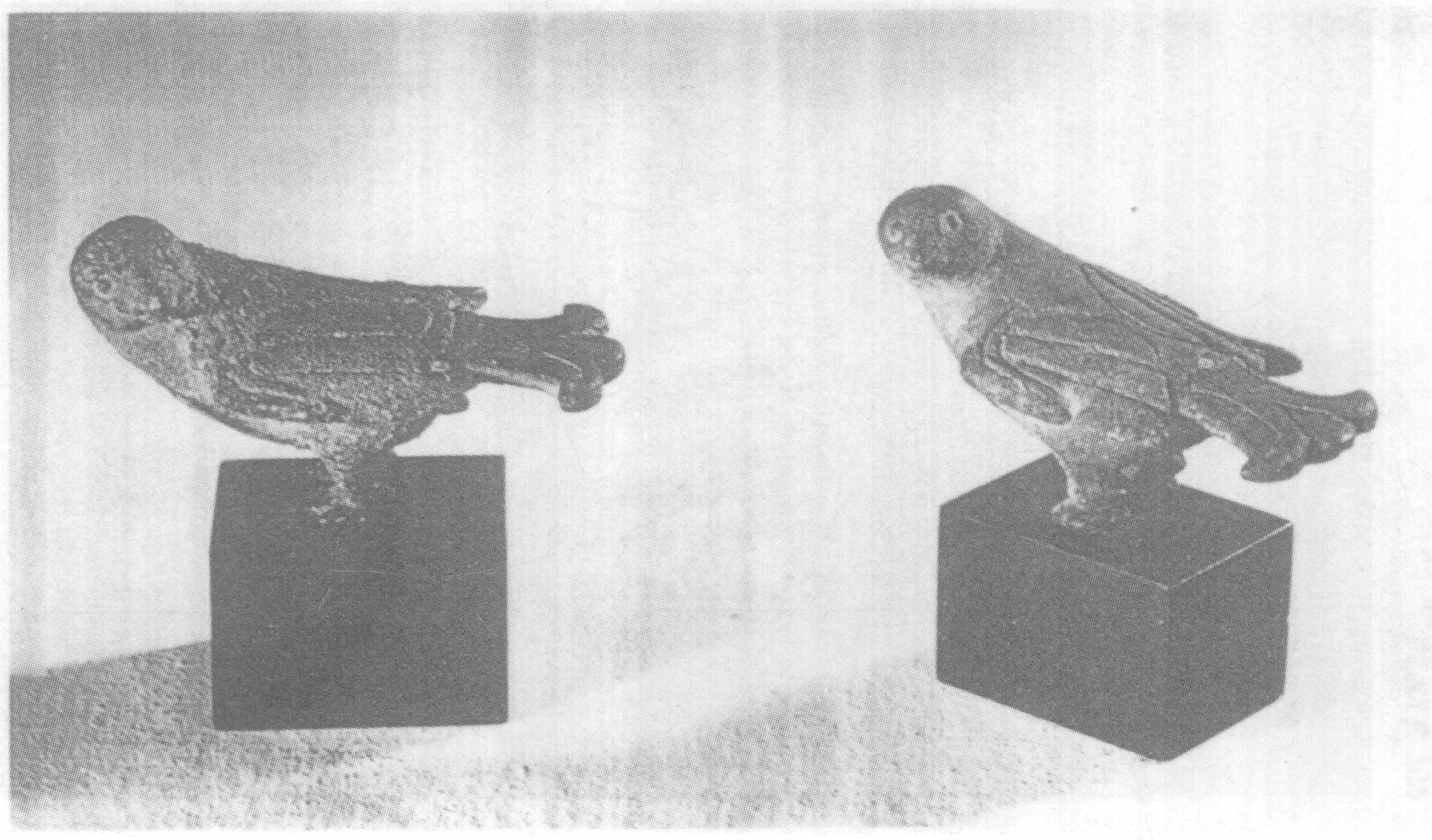
This is one of the extremely interesting group of bronze sculptures found in the Han family tombs at Kin-ts'un near Lo-yang (*circa* 450–*circa* 230 B.C.), as reported by W. C. White in his *Tombs of Old Lo-yang* (1934). Umehara (*Rakuyō*, Plate 34) tells us that this particular specimen belongs to the Winthrop Collection, but in fact it came to the Pillsbury Collection from that of Mr. Eumorfopoulos.

The kneeling man presents a cup in his respectfully extended hands. His face, sensitively modeled and very much alive, has neither a low and flat nose nor high cheekbones nor slanting eyes. His coat has the left lapel crossing the right and held tight by a simple belly-strap. Most interesting is his head covering: a kind of "openwork helmet," i.e., a protecting hood (leathern?) that is broad at the back, rises in a top so as to hold the hair knot, and then immediately narrows into a tonguelike band which goes forward to the forehead, but only along the crown of the head, leaving the sides uncovered. It is held fast by a crossing strap which runs down in front of the ears and around the chin. At right angles to this, another strap goes along the top of the forehead, above the ears and around the occiput.

Huai style period. HEIGHT: 11 1/8 inches. WIDTH: 6 inches. PATINA: green. PUBLISHED: Bull. Minn., 34:18; Umehara (see above); Menzies, Plate 20.

NUMBERS 94 AND 95 PLATE 109





NUMBER 96 PLATE 111



NUMBER 96 PLATE 110



NUMBERS 97, 98, AND 99. *Finials.* PLATE 112

These finials, probably for the ends of dagger-axes or spear shafts, are all inlaid with silver and show various patterns well known from the finds at the Han family tombs at Kin-ts'un, near Lo-yang (*circa* 450–*circa* 230 B.C.). They have been studied in detail by J. G. Anderson in BMFEA, Vol. 7.

Huai style period. LENGTH: 4 5/8, 5 3/8, and 5 1/4 inches respectively. DIAMETER: 1 3/8, 1 7/16, and 1 1/2 inches respectively.

NUMBERS 97, 98, AND 99



PLATE 112

NUMBERS 100 AND 101. *Dress hook* AND *Finial.* PLATE 113

The dress hook is of gilded bronze inlaid with turquoise. It is an excellent specimen of a well-known type. A hook of this shape and of a closely kindred inlay pattern is shown in Eumorfopoulos Cat., Vol. 2, Plate 40.

The finial, similar to those in Plate 112, and probably also for a dagger-axe or spear shaft, is inlaid with silver in one of the well-known Kin-ts'un patterns.

Huai style period. LENGTH: Dress hook, 13 3/8 inches; Finial, 5 5/8 inches.

NUMBERS 100 AND 101 PLATE 113





NUMBER 102. *Dagger-axe, Kuo.* PLATE 114, UPPER HALF

The curling dragon and bird-dragon patterns are inlaid with gold.

Huai style period. LENGTH: 7 5/8 inches. WIDTH: 3 7/8 inches. PATINA: green.

NUMBER 103. *Dagger-axe, Kuo.* PLATE 114, LOWER HALF

This Kuo with socket has the tang and part of the axe in openwork. A tiger, which bites on a snake, stands on the neck and back of a bird. The body of the tiger is adorned with a dragon figure in low relief along the back, and with granulation on the larger surfaces.

Huai style period. LENGTH: 5 13/16 inches. WIDTH: 2 5/8 inches. PATINA: grey-green.

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Index

BRONZE CULTURE OF ANCIENT CHINA

An Archaeological Study of Bronze Objects from Northern Honan, dating from about 1400 B.C. - 771 B.C.

WILLIAM CHARLES WHITE

Sometime Bishop of Honan

Keeper Emeritus of the East Asiatic Collection of the Royal Ontario Museum

MUSEUM STUDIES — NUMBER FIVE

UNIVERSITY OF TORONTO PRESS — 1956



Wine container of the Chia type (NB.4026: p. 25)

IN MEMORIAM

JOHN CALVIN FERGUSON, PH.D., LL.D.

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Advisor to the Government of China

Educationist, Sinologist, Philanthropist

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PREFACE

THIS STUDY of *Bronze Culture of Ancient China* follows the preceding study of *Bone Culture of Ancient China* (Museum Studies, No. 4), and much of the background of the latter is applicable here and need not be repeated. Furthermore, many books have recently been published on Chinese bronzes dealing intensively and scientifically with the examination of forms, motifs, and, when known, the historical and geographical setting. It would be a monotonous and unnecessary duplication to attempt to describe the many hundreds of objects of ancient Chinese bronze in the collection of the Royal Ontario Museum, parallels of which have been so fully described by others.

Two kinds of information about collections of Chinese bronze are usually lacking: (1) on the geographical areas from which the objects came, and (2) on the various objects known to have been associated together. The Royal Ontario Museum is fortunate in having considerable data concerning these aspects, and because of this the present study will not deal with ancient Chinese bronzes in general except by a brief introduction, but will be concerned with describing and illustrating a number of groups of associated objects, now in the galleries of the Museum. It must be borne in mind that the groups enumerated are not to be taken as complete sets of ceremonial vessels from the respective tombs, but only parts of the original groupings; yet the fact that many objects sometimes were associated together, were obviously a part of the same burial, and were vouched for by persons who had to do with their excavations should be of value towards increasing our general knowledge of early Chinese bronze culture.

All material described in this study came from Honan tomb sites and in most cases from known localities. The objects belong mainly to the Shang dynasty and Early Chou (*c.* 1400–772 B.C.) and come from three main areas: the Anyang area, for Shang objects prior to 1122 B.C.; the Wei-hui area (to include Hsün Hsien and Hui Hsien) for the period in general after that date; and the Loyang area for the same period.

Since it was the site of the capital of the Middle Kingdom, Loyang was presumably the centre of the highest standards of Chinese cultural practices throughout almost the whole period of the Chou dynasty. A limitation to 772 B.C., which marks the end of Western Chou, would thus omit important groups that have come to light from tomb sites of Eastern Chou, such as Old Loyang,[1] the Hsin-cheng finds in central Honan, and the Li-yü and Shou Chou materials.

[1] W. C. White: *Tombs of Old Loyang* (Shanghai, 1934).

中華聖公會河南主教

懷履光偉廉

北美坎拿大住開封南關

ACKNOWLEDGMENTS

WE ARE under great obligation to the Advisory Committee on Publications of the University of Toronto Press which has made this project possible; and to the Directors and staff of the Press, who have so courteously and painstakingly given their skilful attention to the production of this volume.

We would also express our thanks to the *Illustrated London News*, and to the London Electrotype Agency, for providing us with duplicate plates of the colour illustrations, which were published in the *Illustrated London News* of March 23, 1935, April 20, 1935, and May 18, 1935. Unfortunately, the original plates were destroyed in the bombing of London, but the duplicates were safe in the Royal Ontario Museum.

In 1946, after VJ Day, we returned to China, and took the plates with us, hoping that the publishing firm of Messrs. Kelly and Walsh of Shanghai would be able to publish the book, but their establishment was quite destroyed by bombing. So in 1947, upon our return to Canada the plates accompanied us again. They had been somewhat damaged by the harsh conditions of travel and transportation in the Honan province, but have been restored as far as possible, and now appear in this book.

Finally, we are greatly indebted to the authorities of the Royal Ontario Museum for the facilities so fully extended to us; and specially to Miss Helen E. Fernald, Curator of the Chinese Collection, and Miss B. Kingston, Secretary-Librarian of the department, for their unstinted help.

W.C.W.

PREFACE

The very extensive excavations made in Honan by the Academia Sinica, particularly at Anyang and Hsün Hsien, have brought to light very important archaeological material, but this has not yet been fully analysed or published.

The Wade-Giles system of romanization is followed in this book, except in a very few cases of place-names where the Chinese postal spelling is retained, such as Sian for Hsi-an, Tientsin for T'ien-ching, Mengtsin for Meng-chin, Sinsiang for Hsin-hsiang. Usually the part of the name which tells the status of a place is capitalized, e.g. Ts'un (village), Hsien (county), Chou (department), Fu (prefecture). It has been the custom generally in English books on Chinese technical subjects to italicize the romanization of Chinese words. To one not familiar with the language this sometimes is confusing and hinders comprehension. As an experiment towards clarity and facility of understanding, this study uses a minimum of italics and makes use of the capital for the initial letter of the Chinese word, but adheres generally to the Wade-Giles system of spelling.

A list of names of the most common ceremonial vessels is given in Appendix B. Numbers preceded by the letters NB are catalogue accession numbers used for Chinese bronze objects in the Chinese Collection of the Museum. An index of these catalogue numbers follows the general index at the end of this book.

It will be noticed that the terms "pictographs" and "pictograms" are both used, yet we try to show a difference in usage by applying pictograph to a simple naturalistic drawing of the object, and pictogram to one that is more ideographic, being a compound of ideas—but there can be no hard and fast line drawn between the two.[2]

W. C. W.

[2]See Joseph Needham, F.R.S.: *Science and Civilization in China*, Vol. I (Cambridge, 1954), p. 27: "The most primitive elements of Chinese were generally *pictographs* i.e. drawings reduced to the essentials, conventionalized, and in time stylized. . . . So far we have mentioned pictograms proper, indirect symbols, associative compounds, and the mutually interpretative symbols."

ILLUSTRATIONS

CONTENTS

BRONZE CULTURE OF ANCIENT CHINA

BRONZE IN ANCIENT CHINA

ALTHOUGH POTTERY of a prehistoric character and stone implements of neolithic type are found in the Waste of Yin at Anyang in strata with highly developed pottery and stone sculpture, there seems to be little if anything in copper or bronze artifacts which denotes the existence of a chalcolithic culture on that site. The bronze culture suddenly appears at the peak of its excellence, and there is nothing to explain its origin or background. The objects show a standard of excellence in casting, a balance and strength in form, and a refinement in design and decoration which have never been surpassed in bronze casting anywhere in the world. They are undoubtedly the finest creations from metal which men have ever made. With all the resources that modern science can command, it has not yet succeeded in producing better bronzes than the best pieces of the Shang. It is assumed that a long period of development must have preceded the Anyang bronzes, and it is reasonably certain that the bronze culture was brought to that locality by the court of P'an-Keng about 1400 B.C. Other sites will doubtless be excavated in the future that will reveal bronzes of the earlier Shang and of the Hsia period, and that will enable us to trace the development to its source.

Because the Bronze Age of the Middle East and the West is known to have existed earlier than that of China, there are those who believe that the manufacture of bronze did not originate in China, but entered as a developed technique, relatively late in the Bronze Age of the world. There is no definite evidence for this assumption; on the contrary the great quantity and variety of the bronze objects show an overwhelming preponderance of Chinese indigenous types, both in form and design, and very few that are paralleled in the other bronze cultural fields of the world. Those who try to find parallels of decorative design in the islands of the Pacific, or the lands of the Aztecs and the Mayas and the American Indians, surely fail to grasp the significance of the unhistoric gap of two thousand and more years.

It has been assumed that the finer bronzes must be later, but there is no evidence to corroborate this, and very early pieces seem to be just as high in quality as those which may be attributed by their inscriptions to Late Shang or Early Chou. Until recently, museums of Europe and America refused to label early bronzes as Shang despite the fact that the Chinese themselves had been calling them Shang throughout the centuries. The finding of such bronzes in the Anyang excavations, with the contemporary writings of the Shang Oracle Bones, settled the question once for all.

Deposits of copper ore are so far not known to exist in that district, so the copper used in casting bronze must have been brought to the locality; for lumps of what appears to be copper

slag, mixed with charcoal, as well as ingots of tin, have been found there, and large numbers of pottery moulds in which the vessels were cast, some showing specks of bronze, proving very definitely that casting was done locally.

Scientific examination of some specimens of Anyang bronze reveals an admixture of approximately eight parts of copper and two parts of tin, with small quantities of lead and other minerals. The method of casting was thought to have been solely by the *cire perdue* or lost-wax process, and this doubtless was commonly used, but the finding of pottery moulds points also to the method of casting directly by sectional moulds, though these latter may also have been used for casting the wax models.

In general, casting by moulds would require that a core of clay be moulded to the desired shape of the interior of the finished vessel, and that the sections of the pottery mould be attached around it, leaving an even space between the core and the outer mould. Bronze pegs were used when necessary to keep the outer shell at the proper distance from the core; these often were absorbed in the molten bronze, and any extending remains would be filed off and polished. The location of these pegs can often be detected on the polished surface of the vessel. The molten bronze would be poured into an opening at the top of the mould, or at the bottom if it was inverted, and when cooled the pottery sections would be removed, the clay core dug out, and the rough spots and points of adhering metal cut, filed, and finished off.

The lost-wax process was similar, except that wax was moulded on the clay core to the desired thickness of the completed vessel, and the decorative design was carved on the surface of the wax. When the artist was satisfied with the wax model, it was brushed over with a thin clay wash which would fill the incisions of the designs on the wax; when this wash was sufficiently dry, successive coats were added, which thus formed a clay shell around the wax model. Over this shell was plastered a thicker layer of clay; and vent holes were arranged for, to allow the wax to run out when the object was heated, and also for the pouring in of the molten bronze, which would fill the cavity formerly occupied by the wax. After cooling, the outer clay shell was broken off, the inner clay core removed, and the completed bronze vessel finished by removing the inequalities in the surface and edges.[1]

In these two processes there would be differences of method, varying with the individual technicians or local practices. Weapons such as knives, axes, spear-points, and dagger-axes, for which no core was required, could be cast direct in stone or metal or pottery moulds, the moulds probably being in similar halves, one imposed on the other, and with a runway for pouring the molten bronze between them.

BRONZE WEAPONS AND IMPLEMENTS

THE MOST IMPORTANT bronze weapons of this period are axes, dagger-axes, spears, knives, and the bronze-tipped arrows used with the composite sinew-backed bow and the cross-bow.

(1) AXES (Yüeh)

The most common type of axe is found in a variety of shapes, sometimes of zoomorphic

[1] O. Karlbeck, "Anyang Moulds," *Yin and Chou Researches* (Stockholm, 1935)

form with an "eye," or with the open jaws of a monster, or decorated with designs of animal masks or cicadas. The animal form sometimes becomes stylized in graceful shapes, and even diminutive axes are found which were probably used in ceremonial burial.

The true axe, that is, the axe with the cutting edge parallel with the shaft, was hafted in either of two ways. One way was to make a transverse socket in the heel of the weapon; the axe so formed is usually known as a socketed axe. The other way was to pierce the shaft, insert the flat heel of the weapon so that it extended beyond the wood, and there lash it in place. In the latter method of hafting, there were usually holes for the lashings, and an extension and flanged ridge to sink into a groove in the front side of the shaft, for snug fitting. The shafts were of wood, probably about three feet in length, the length of a Canadian axe handle.

A second type of axe is that with an elongated square-shaped blade, socketed for the shaft, and sometimes carrying one or more knobs or stud-like projections, reminiscent of the heel of the ordinary axe. A possible variation of this type has a circular blade in place of the square blade, but otherwise it is similar.

A third type is a knife-like weapon lashed lengthwise at the end of the shaft. These axes were frequently zoomorphic in design and decoration, and were attached to the shaft by a half-socket and ring-band formation which seems to have been in use throughout the Chou dynasty and perhaps the Han. Probably there are other types which might well be classified in groups, for axes seem to be quite plentiful and of great variety. Evidently they were for the most part royal weapons,[2] although wood craftsmen also used axes, for example, the wheelwright in the making of chariots.

(2) DAGGER-AXES OR HALBERDS (Ko)

Although bronze dagger-axes are found in other countries, they are not as common as in ancient China, nor are they as varied in form or decoration. The dagger-axe is the most characteristic weapon of early China, and its development in form over a period of some fifteen centuries, from Shang to the Later Han, is clearly recognized.

The Shang dagger-axes or halberds may in general be arranged in four groups, with other extended classifications according to variations. The first group has a triangular-shaped blade with a flat heel which pierces the shaft and is lashed to it. Another group contains the simple dagger-shaped weapon with flat heel; a third group is similar in shape but socketed for hafting and is often inscribed with pictographs. A fourth group includes a wide range of thin flat dagger-axes, usually with highly decorated heel sometimes inlaid with turquoise. These could not have been intended for actual warfare, but only for ceremonial use or for burial in tombs; none of them is known to have been socketed. All dagger-axes would appear to have been furnished with a wooden shaft some three feet in length. The top of the shaft might have been capped with a bronze finial just above the blade, and the butt also might well have had a finail similar to those of Chou. These dagger-axes were usually decorated with tassels, as is seen in the archaic pictograph which designates that type of weapon.

[2] C. W. Bishop: *The Beginnings of North and South in China.*

(3) SPEARS (Mao)

There seem to be three general groups of bronze spears, and all are socketed. The first group is distinguished by a large, powerful point sometimes found with inscriptions or mask designs; another group has points of the laurel-leaf shape; and a third has a smaller lighter lance-point which may be the bronze parallel of the bone lance-point. Other forms of spear-points may possibly come to light in time, one of which may be a dagger-shaped point, unsocketed, which was certainly known in the Chou period. The spears also carried tassels, which were attached to the holes at the base of the blade. The shafts were probably longer than those of the dagger-axes, but they must have had socketed pronged terminals at the butt end, which may have been forked for thrusting into the ground when the spear was required to stand upright. What appear to be bronze butt-ends, both plain and decorated, socketed, fork-shaped, and with two and sometimes four prongs are quite common.

(4) KNIVES (Tao)

Apparently there were no swords in use in Shang times, and they do not appear until the Middle Chou. Knives (Tao) on the other hand are common. Most of them would appear to be sacrificial knives, although some of them must have been knives for domestic and general use, but very few, if any, could be accepted as weapons for warfare. One type of knife, often large and powerful, carried a wooden handle, and the blade was sometimes elaborately decorated. A smaller knife has a bronze handle of one piece with the blade. The latter is found in a variety of forms, with open-work handle, ring- or jingle-ended handle, sometimes bearing inscriptions, and frequently with an animal form in the round, making an artistic finial for the handle. A still smaller bronze knife, delicately fashioned and usually with zoomorphic handle of bronze in dragon or fish shape, is a very attractive type, and must have been intended solely for ceremonial use. Under "knives" must also be included what has been considered to be a bronze razor-blade, the handle of which was probably wound around with cord, or had wooden strips attached to it.

(5) ARCHERY EQUIPMENT (Kung Chien)

Bronze arrow-points are not as common as bone, and those found are mostly of the flat and winged type which are paralleled in bone and stone and jade. Bronze bow-ends were probably used, similar to the inlaid bone bow-ends; and archers' thumb-rings are not uncommon. The composite bow and the cross-bow were apparently the most common types of bow in use in Shang time, and their use has continued to the present. In the hills of Fuhkien today, cross-bows with a trip-trigger control are used with poisoned arrows to kill tigers and leopards.

(6) MACE-HEADS (Li Kuei-t'ou)

Bronze knobbed mace-heads are known to have been used, probably in the same manner as stone mace-heads. Some of these were possibly ceremonial mace-heads, but even these were sometimes of such a weight as to make an effective weapon.

(7) DEFENSIVE ARMOUR (Ping Ch'i)

Bronze frames of shields, which were doubtless covered with rawhide or leather, are

known to exist; and bronze helmets were found at Hsün Hsien which belong to the very beginning of the Chou dynasty or even the end of Shang, as may be gathered from the bronze helmets found at Anyang in 1934.[3]

(8) TOOLS (Chia Huo)

Among bronze tools the most common are adzes or socketed celts. They are both plain and decorated, and were probably hafted, with the cutting edge forming a right angle with the direction of the handle in the manner of the modern iron adze or Pen, thus differing from the axe, the cutting edge of which is parallel with the handle. What may be an unsocketed celt-blade, or the knife of a carpenter's plane, is a thin flat blade with design on one side only, the other side being plain (NB. 3978, Plate XXI). The socketed celt appeared in central and eastern Europe in the late Bronze Age, but was not current in Egypt, Asia Minor, Iran, and India. In China it occurred in considerable numbers during the Shang and Early Chou periods, and it continued through the centuries to the present time. From China its use probably extended to North Burma, Cambodia, and into Indonesia.

A Shang wheelwright's set of tools consisted of three pieces: an axe, a bronze adze, and a chisel, hafted for a wooden handle. A small all-bronze chisel, with reinforced top, required no wooden handle. No bronze mallets are yet known, but probably mallets were made of wood, and so have disappeared. Bronze files, according to file marks on the oracle bones, were both fine and coarse. For boring in bone or stone or jade, a bow-shaped brace was used, similar to that in use today; but what the bits or points were like is not clear, though they may have been of tempered bronze. It is known that they bored in various diameters, from a pin-head size up to at least half an inch, as seen in the small jade pendants and the auger-bored cavities of the oracle bones; also it is generally accepted that abrasives were used.

(9) CHARIOT AND HORSE TRAPPINGS (Ch'e Ma Ch'i)

Chariots, with two spoked wheels, and drawn by two animals yoked together, are depicted on the oracle bones. They were not only for military purposes, but for the chase, and for ceremonial and possibly general use. The Odes would imply that more than two horses were sometimes used to draw the chariots. The body of the chariot was attached to the transverse bar, without springs, and the wheels were placed on the ends of the axle-bar in the usual way with axle-caps over the ends, through each of which a linchpin was thrust, which kept the wheel in place. These axle-caps were quite long in Shang and Western Chou times, but in Eastern Chou time they were shortened. The hub of the wheel was rimmed with a bronze ring, and the sections of the rim of the wheel were probably held together by bronze sectional strips nailed around the rim, similar to the method still practised in Northern China, except that the sections are now of iron. A well-known graph found on some bronze vessels depicts a cart with two men under the yoke, which might well suggest that at the court man-drawn chariots were in use. It is recorded in the Bamboo Books that in the thirteenth year of Emperor Kuei (1575 B.C.), "he made for the first time men-drawn carriages." A bronze

[3] *Illustrated London News*, April 4, 1936.

Fang-yi vessel in the Chinese Collection of the Royal Ontario Museum carries this very same graph.

Many bronze objects are obviously chariot fittings but their particular use is seldom known. One type of bronze object which is quite common is a finial for a wooden beam. The design on the object may be a bird or dragon or some other monster. Another type of finial, found in pairs, is a tube, either round or square, with decoration of monsters in relief. Plaques of various shapes and kinds, long or short or angular, are found. Heavy bronze strips, with decoration, were obviously turned at one end for attachment to a shaped wooden object. Large circular plaques were probably ornamental bosses, as were also plaques of a smaller type; and other kinds of plaques were probably parts of large animal masks, which we know were quite common. Smaller masks of a similar kind, but not in sections, were also common. Plaques of another kind, often highly decorated, had loops on the back for attachment to leather or cloth, and in some cases they may have been used for harness-strap decoration. A shaped piece of bronze, with rosette and bird design, may have been a decorative plaque over a horse yoke or shoulder collar. Bronze jingles of arc shape were common, sometimes with bells at the two ends or with jingles of horse-head design (Plate XXXVI), and sometimes inlaid with turquoise. (See Appendix G.) A plaque for the horse's face, between its eyes, was common, and also a peculiar plaque with two holes like nostrils the use of which is still undetermined. Many small plaques, like buttons, with monster-mask design inlaid with turquoise were purely decorative, as were also some of frogs and cicadas and heads of donkeys. Bronze bit-plaques were found in various bird and dragon and monster designs, and an elephant design with exaggerated trunk seems to have been a favourite. Some of these plaques were found attached to the horse-bits, which latter were of the usual types, varying in size and in the number of chain links; such bits have continued in use in China through the centuries to the present day. There is nothing to show that the Shang people ever rode horseback, and the use of horses for riding seems not to have appeared in China until the end of the Chou dynasty. Even then the Chinese apparently did not use stirrups, for these, as far as we know, are not found before the fourth or fifth century A.D.

(10) VARIOUS

An object which has been variously interpreted is composed of four tubes of a finial caplike shape, forming the four corners of a square. This square has four sides which may or may not be decorated, and a horizontal plate connecting the tops of these sides, through the centre of which a circular hole was pierced, obviously intended for a pole or staff. Several of these objects are known, and it has now been determined that they were lamps, and that the tubes were oil containers.[4]

One fact of great interest which has come to light is the use of tamed elephants in Shang times. The elephant design appears on the bronzes, the carved bones, and the carved stone, and there were small bronze figures of elephants which may have been used as ornaments or

[4] "A Chinese Bronze Lamp," *Parnassus*, vol. XII, no. 2

charms. That the elephants were probably tamed for work is seen in what may be bronze elephant-goads, and in the pictographs on the oracle bones, which show elephants being guided by hand.

BRONZE CEREMONIAL VESSELS

THE SUPERB QUALITY of Shang bronze work has already been mentioned, but the objects that show this work at its best are the ceremonial vessels. Most of these vessels were used in rites that had to do with sacrifices to the ancestors, either at the altars in the home, in the ancestral temples, or at the tomb-side, or in state sacrifices or ceremonies connected with anniversaries and weddings and other important functions. Some of the vessels may have been for domestic use, but it is difficult to single these out from the purely ceremonial vessels, and it is probable that certain vessels were used for both purposes.

One large group of vessels and objects is similar in form and design to those used successively in the sacrifices and ceremonies, or to the domestic vessels; but their quality of workmanship and material is greatly inferior, and often the clay cores have been allowed to remain in the base of the handles and legs. This type is known as Ming-ch'i, that is, "bright vessels," and they are inferior reproductions made only to be used at the funeral ceremonies, and to be buried in the tombs for the use of the dead in the spirit world. These funerary bronzes cover the whole range of bronze objects, including ritual vessels and objects, musical instruments, weapons, chariot fittings, and horse trappings. Inscriptions are not as common on these vessels as they are on the regular ritual vessels, which latter are usually in sets co-ordinated by a common inscription, and intended for successive or "everlasting" use. On the other hand, ritual vessels, weapons, bells, and chariot and horse equipment, and any regular types which are not Ming-ch'i types, may occasionally be interred in the tomb of an important person. It is because of this practice in the Shang dynasty that bronzes and other artifacts of that time have been preserved until recent excavations brought them to light.

Shang tomb sites have often been found by wash-outs, by an object being ploughed up in the fields, or by experimental boring in likely spots. The one site definitely producing bronze of the Shang period is the Anyang area, and the most striking evidence of authenticity of dating in this area is that of the inscribed "oracle bones" found with the bronze and other objects.[5] The bones are contemporary written documents, the genuineness of which is not questioned. Although what appear to be Shang bronzes are found in other places, it is generally felt that they may have been carried to those places by the Chou conquerors after the overthrow of the Shang dynasty. This applies to Hsün Hsien and Loyang and possibly other places.

It was also a custom in Chinese Classical times to send presents of ceremonial vessels, and to have them carried, pilgrimage style, from state to state. Herodotus tells about the delegation of Hyperboreans who brought sacred objects, wrapped in straw, from their country to Delphi and about the Delphians making a shrine for the objects, which were greatly esteemed

[5] W. C. White: *Bone Culture of Ancient China* (Toronto, 1945).

by the youth of Greece. Hyperboreans, "the people beyond the north wind," are now understood to be Chinese, and they were the farthest Eastern people mentioned by Herodotus.

There is the probability that the transitional period from Shang to Chou would allow of the Shang type of bronzes being used well into the early Chou period, since the two Chou kings, Wen Wang and Wu Wang, were successively contemporaneous with the last fifty or so years of the Shang dynasty. In the Northern Sung dynasty (A.D. 960–1127) some of the tombs at Anyang must have been opened, for Shang bronzes figure in the Sung archaeological literature, and they are definitely attributed to the Shang period. Western connoisseurs have hitherto been reluctant to accept these Shang attributions, until the recent overwhelming evidence from Anyang removed all doubts on the question.

The beginning in scientific excavations at Anyang recently made by the Academia Sinica has produced much Shang material, and has revealed tomb-chambers of what are apparently royal tombs of the Shang. War conditions in China brought these excavations to a stop, but the material obtained has been very important, and confirms the Anyang, or Yin-Hsü, area as having been a site of the capital of Shang, and as being rich in what is really dated material.

The bronze ceremonial vessels of Shang are very much like the contemporary Anyang pottery vessels, and their differences are due mainly to the nature of the materials of which they are made.

In the *K'ao Kung Chi* there is a record of the various proportions of copper and tin for the making of the alloy of respective groups of bronzes, but analyses of Shang bronze fragments do not correspond with the tables given in the *K'ao Kung Chi*, perhaps because the latter record was included in the *Chou Li* at least a thousand years later than the end of the Shang. The Shang bronze alloys do not seem to have been regularly proportioned in their content for the various groups of bronze objects. In the Shang period there is so far no evidence of gold or silver inlay of bronze, nor is there gilt bronze, yet inlay of turquoise is common, and a filling or inlay of black lacquer in the surface designs and even in the inscriptions deeply cast within the vessels themselves is very general. Many of the vessels had been covered or wrapped round with woven cloth, including fine silk cloth, fine and coarse woven flax cloth, a rather coarse mat of woven reed, and even straw and millet stalks.

The designs on the bronzes, as on the carved bones and stone and jade, are generally zoomorphic with a background of meanders. The animal forms are usually stylized, yet there is a feeling of movement and power which is not generally associated with high stylization.

The so-called T'ao-t'ieh is the most common animal monster mask. It is impossible to define the animal this represents, for sometimes it appears to be a tiger, and again it may be an elephant or an ox or a stag, while often it may seem to be a composite of different animals and birds and reptiles. The carved bone spatulas, with masks of similar form, but with various kinds of horns, are parallel evidences on this point.[6]

Dragons of various kinds are common in the bronze designs, as in the carved bones, especially the little K'uei dragon, usually given in profile. In the summer of 1946 the writer

[6] *Ibid.*

TEN GROUPS OF CEREMONIAL OBJECTS

was interested in watching the antics of these little lizards on the window screens of his home in Honan. They ranged from two inches to five inches in length, and demonstrated all the contortions of the K'uei dragon carved so cunningly on ancient bone and jade, and seen so frequently in the bronze designs. One could not but be convinced that these little creatures were the prototypes of the K'uei.

Stag heads, buffalo and ox heads, elephants, tigers, goats, rams, bears, hares, fish, lizards, snakes, cicadas, owls, eagles, and other birds are all found in endless variety.

The backgrounds are the regular forms of meander, either square or slanting, sometimes with rounded angles and lines, and in various combinations.

There seem to be no twisted rope borders in Shang, but bronze loop handles in twisted thong design are plentiful. Rosette designs in the form of bosses and circles in low relief are numerous, including the small circles within a larger circle, the line-cut spiral commas within a circular boss, the quatrefoil design of various kinds, the meander square with central eye or prominent "nipple" or spike, star designs, and scale designs of various kinds.

A good deal of attention has latterly been directed to classifications of style in early Chinese bronzes. Comparisons of form and decorative design have naturally been prominent, but inscribed bronzes have probably produced the most important data bearing on authenticity and period. Some scholars have been interested in classification of style according to locality, a method which has its value, for instance the centring of the Shang style in the Anyang area and of Western and Eastern Chou in the Loyang area, and the identification of characteristic styles with certain other smaller localities. However, the more one looks into the historical backgrounds the more one is convinced that generalizations regarding localities have probably gone too far. It is true that the power of the central state of Chou had waned to such an extent in Middle Chou that the country became a group of independent states, yet, with the exception of Ch'in, there is nothing much to lead to the belief that independent styles were originated or developed to any extent in the spheres of influence of those states. There was a nominal recognition of the headship of the Chou kingdom which carried with it a certain unity of state ceremonial. There were constant alignments for interstate conflict, intermarriage between the ruling families, ceremonial visits between them, and attendance at court. Even when a state was exterminated it seemed to be a recognized matter of honour to foster the remnant of its people. There was a tendency to conserve the rituals of earlier days, and certain states accepted and practised those rituals, as when Confucius expressed his preference for the ritual of Yin. Certain literature also would be standard in the whole country. With more light on the historical and geographical data of those early periods we may have to concede the essential uniformity of ideas and styles and ceremonial and governmental usages, even though the states were more or less independent of Chou. The greatest differences would be found around the outer borders of the country touched by the barbarian districts, and particularly in the area controlled by Ch'in.

The relationship of the Bronze Age to the Iron Age in China is naturally a subject of great interest. There is a wide diversity of opinion as to these periods, so we have refrained from considering them at this point and have briefly dealt with them in Appendix F.

obtained from the excavation. There was no evidence of a tomb-chamber, but objects seemed to be scattered at random and embedded in the soil. Probably because of this, some important vessels usually found in ceremonial sets were not forthcoming, and they may still be hidden in the soil. So far as the writer knows there has been no specimen from this excavation of the following types: large Ting, P'an, Kuei, Li, Lei of the larger type, Hsien, Tsun, or Ho. These are all usually well represented as standard items in early groupings of vessels. There was a miniature Ting among the vessels (NB.4022, Plate XI); and there was also a small Lei (NB.4029, Plate X).

Apart from the ceremonial vessels there have been found many dagger-axes, battle-axes, knives, spear-points and butts, jingles and bells, and chariot plaques and fittings, which would suggest the tomb of a military personage of high rank. From the recurrence of certain pictographs on the tomb objects, and the integration of historical data, it is surmised that the individual was the Marquis of Yung (Yung Hou), whose name was Tiger but who was also known as Tzu-Chih, a prince of the royal house during the reign of Wu-Ting (1324–1265 B.C.). Tzu ("son" or "prince") was the family name of the ruling house of Shang. One of his offices at the court was probably that of keeper and bearer of the ceremonial Ko or halberd. Pictographs of a tiger, of a man carrying the Ko, and of the Tzu character ("son" or "prince") are frequently used on the objects. (See NB.3978, Plate XXI.)

Another pictograph not yet satisfactorily explained is the Shang cruciform Ya in association with a standing man holding a staff or wand; and also the character Tzu ("son" or "prince") in association with "rain" (Yü) as found on the covered pail mentioned above (No. 4). Is it possible that Tzu-Yü designates a "prince of rain"—the official responsible for rain or prayers for rain? (See Plate VIII.)

Another pictograph was Tzu in conjunction with Hsi (a mat). This is found on a pair of libation cups of the Chüeh type (NB. 4031, Plate II). In ancient China officials "sat on the mat," presumably in council, and Tzu-Hsi might well refer to the president of a council, or to a member of the royal family of Tzu. Furthermore, it was the general practice in China to have two high officials connected with each main department of the court who were designated officials of the "right" or the "left," respectively. This practice goes back to very early times, and has continued down through the centuries almost to the present day. In the pictographs of this pair of libation cups the Tzu characters are arranged differently, for one turns to the right the other to the left. Solomon had his cup-bearers (I Kings 10: 5); and in China about the same time, the rulers seemed also to have had their cup-bearers, designated, according to their practice, cup-bearers of the right and the left, respectively! It might be said that the different forms of the Tzu character on the pair of cups refer only to the placement of the vessels, but these were libation cups, which required human agency in their functional use in connection with the royal sacrifices. It must be accepted that this is not an accidental or exceptional case, for in the Toronto collection there are parallels, one being that of a pair of libation beakers of the Ku type (NB.4063, 4064, Plate LII) in which the graph is arranged in similar apposition.

GROUP I

THE ELEPHANT TOMB SET

Shang, Wu-Ting Period, 1324–1265 B.C. Anyang, Honan

FROM 1927 TO 1931 in Honan was a period of strife which greatly hindered the search for antiques, and put a stop to much excavation, both official and private. In 1933 a new governor was appointed to the province, who was an enlightened man, kind but firm; he soon restored peace and confidence so that business prospered and excavations were resumed.

It was in July of 1933 that a Chinese friend brought in four excellent bronze vessels that had just been unearthed from a new site east of the village of Hsiao-t'un and near the town of Anyang (see Maps A and B, Appendix H). This area had not hitherto produced anything of archaeological interest; as a result, the landowner, and our friend the dealer and his associates, all local men, were able to keep the knowledge of the discovery under their own control. This excavation came to be known by us as the Elephant Tomb, because of the dominance of the elephant motif, in the form and design of the objects unearthed. Some scores of objects from this tomb are now in the Royal Ontario Museum at Toronto, and probably as many more have been scattered in various countries.

The four objects that came first were the following:

(1) A tripod vessel of the Chia type, used for heating wine for the sacrifices. Height 16 inches (NB.4032, frontispiece).

(2) A covered ewer of the Kuang type. Length 10 inches (NB.4027, Plate V).

(3) A similar Kuang vessel with elephant-head cover. Length 7.5 inches (Plate VII).

(4) A covered pail of the Yu type. Height 10.25 inches (Plate VIII).

Of the above vessels the first and second came to the Museum at Toronto, the third went to a Japanese collection, and the fourth to the collection of Sir Neill Malcolm in England.

The Kuang with elephant-head cover (No. 3) was very clean and free of soil encrustation though it did show traces of the fine silk cloth in which it had apparently been wrapped. We were informed that it had been found inside a bronze vessel which was broken into numberless fragments.

From these four objects it was apparent that an important personage must have been interred in the tomb, or his shrine altar established there, and every endeavour was made to obtain information concerning the burial and to gather together whatever objects might be



PLATE I. One end of bow-shaped jingle, decorated with a horse's head at each end (NB.4035; p. 36)

Another instance that comes to mind is that of a pair of libation cups of the Chüeh type illustrated in a Chinese publication.[1] The graph is a well-known one of a bird with a Ko resting on its head, and the graphs on the cups face in opposite direction (cf. Group X (A). NB.6413).

So far no iron, gold, silver, or pewter artifacts seem to have come from this tomb, but apart from bronzes of exceptional merit, there were finely carved jade and stone objects, and mother-of-pearl and cowries. Turquoise was used as decorative inlay in bronze and bone and ivory. It is quite possible that carved white pottery as well as carved ivory and inscribed oracle bones were among the tomb objects, but as yet we have no evidence of them.

On the other hand there is clear evidence to show that two large tiger-face masks, made up of many sections of mother-of-pearl shell, were obtained from the Elephant Tomb excavation. These masks are described and illustrated in the previous study of this series[2] and twelve letters, written by a Chinese Christian clergyman on the spot, are in the files of the Royal Ontario Museum. These letters were accompanied by a sketch diagram showing the order of the segments forming the masks, and reveal that the larger mask was made up of fifty-four segments, while the smaller one was a combination of mother-of-pearl and carved white marble sections, sixteen in all. The letters are dated from July 1935 to 1937, and the writer speaks of the masks as "Tiger-animal-faces" (Hu-shou-mien), and says that they came from the "Tiger-Ewer Pit" (Hu-Yi K'eng), which was a reference to the Kuang or ewer which had a tiger's head on its cover (NB.4027, Plate V). (The Chinese called the excavation Hu-Yi K'eng; it was the Westerner only who spoke of it as the Elephant Tomb.) The writer of the letters stated there was much competition among the buyers for the shell fragments, for such shell masks had not hitherto been found. This experience encourages us to hope that some of the other random material in the Museum collection known to have come from Anyang, and said to have come from the Elephant Tomb, might not on further enquiry be found to belong to the group of the Shang personage Tzu-Chih.

Meanwhile, except where otherwise definitely stated, it may be accepted with confidence that the objects given in the following list come from excavations located east of the village of Hsiao-t'un and west of the Anyang railway station, that they are of Shang period about the time of King Wu-Ting (1324–1265 B.C.), and that they mark the tomb or shrine area of a Shang prince who flourished about the time of King Wu-Ting (see Appendix D).

[1] Huang: *Yeh-Chung P'ien-Yu* (Peking, 1942), Part III.
[2] W. C. White: *Bone Culture of Ancient China* (Toronto, 1945), pp. 209–212. When this Bone Culture study was prepared the particular excavation in Anyang was not specified owing to lack of information at that time.

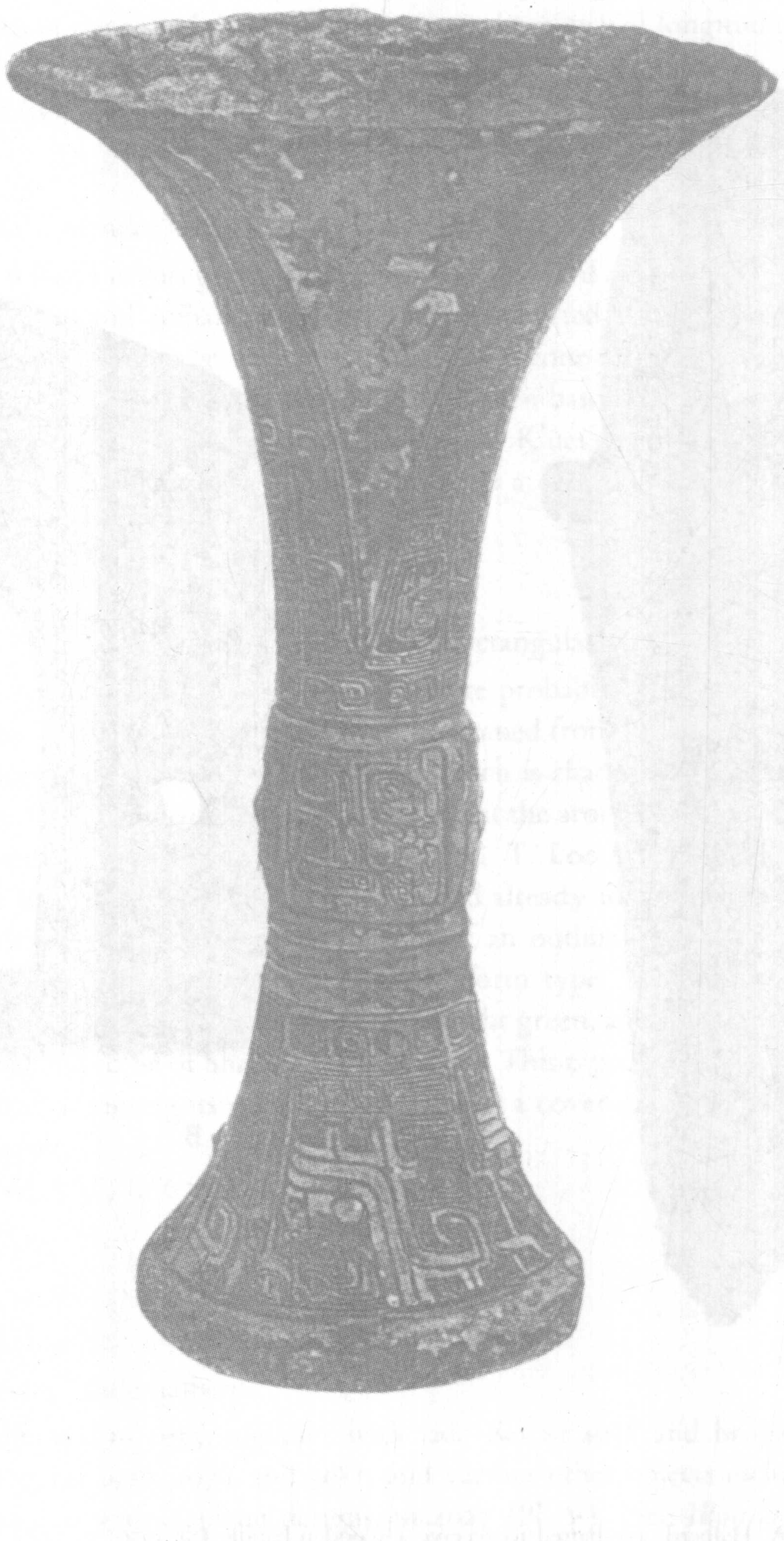


PLATE III. Wine beaker of the Ku type (NB.4034; p. 26)



PLATE II. Libation cup of the Chüeh type (NB.4031; p. 25)



PLATE IV. Wine beaker of the Ku type (NB.4032; p. 26)



PLATE V. Wine ewer of the Kuang type (NB.4027; p. 26)

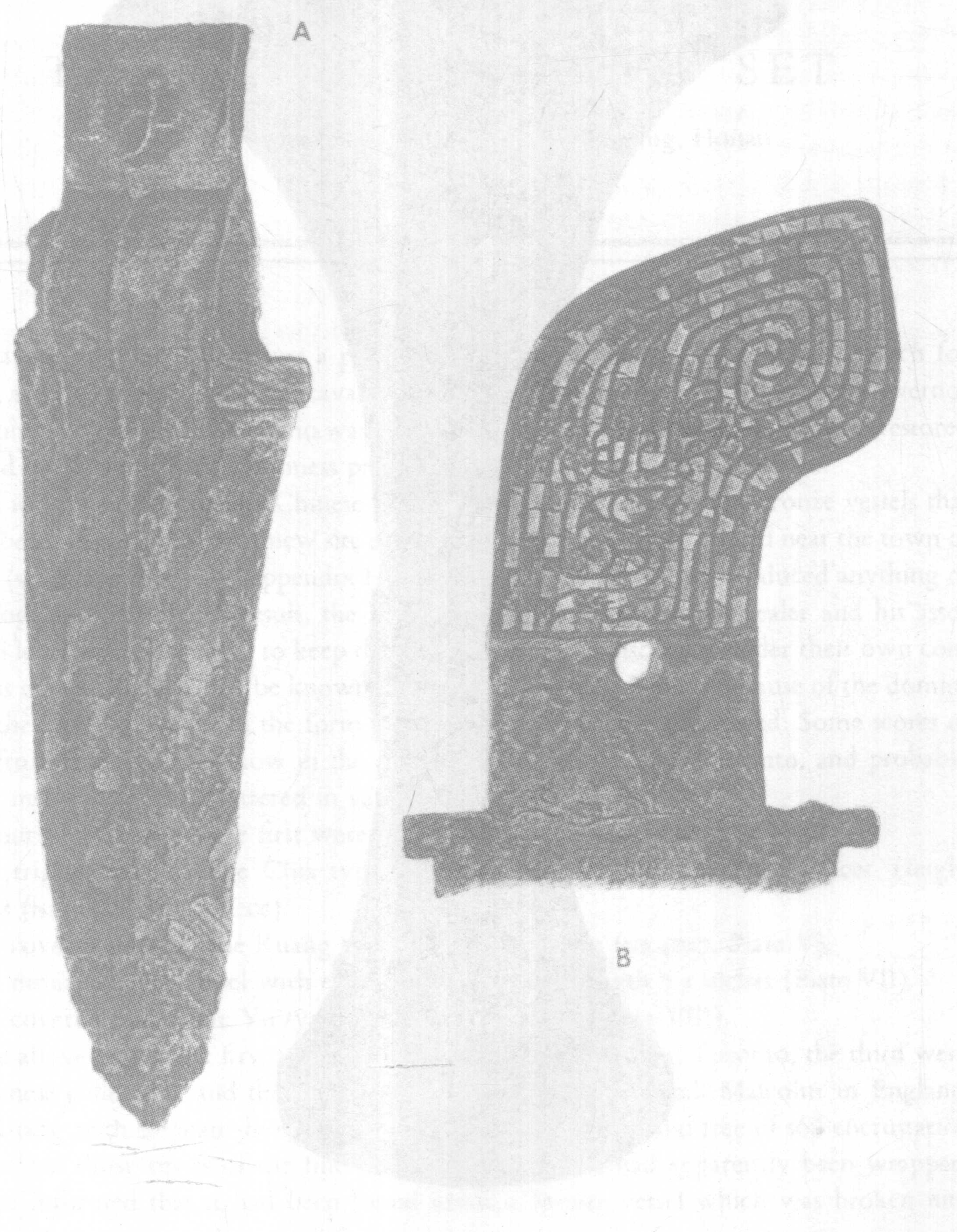


PLATE VI A. Halberd, axe-hafted to receive a wooden handle (NB.3976; p. 31). B. Detail of halberd with inlaid turquoise (NB.3979; p. 30)

OBJECTS IN THE ELEPHANT TOMB SET

THE VESSELS

1 NB.4026 CHIA Wine container — FRONTISPIECE

Used in heating wine. It has three sharp-pointed feet that are undecorated. Its flat-bottomed bowl is highly decorated. It has one handle on the side, and two short posts spring from the lip of the bowl, which are capped with mushroom-shaped knobs. One of these knobs is reduced in size through corrosion, the other is complete and covered with silk cloth encrustations. There is no inscription. It is still the custom in China to heat the wine used on ceremonial occasions.

Ht. 16″; Dia. at rim 10.25″

2 NB.4030 CHÜEH Tripod libation cup

This helmet-shaped cup has the usual three pronged legs and a handle on the right side of the bowl which is topped with an animal head. Two posts springing from the rim are capped by mushroom-shaped knobs. It has two spouts, one flat and pointed, the other trough-shaped. The round egg-like bottom shows traces of carbon from use on a fire. Under the handle is an inscription of two pictographs, Tzu for "son" or "prince," and Hsi for "mat," probably a symbol for the "council" which "sat on the mat" when in session. If this interpretation is correct it would associate this vessel with one who was president of the council, or possibly just a member of the royal house, the family name of which was Tzu. (See Appendix D.) The pictograph for "mat" has the arrow-shaped markings which usually designate the round in Shang décor, and suggest the fact that the mat was rolled up when not in use, as is done throughout China today with the universally used sleeping-mat. Such a mat is generally woven of fine rushes, or a very fine aquatic grass.

Ht. 7.9″. Graph Chart IA-2

3 NB.4031 CHÜEH Tripod libation cup — PLATE II

This helmet-shaped cup forms a pair with the last object (NB.4030), and is identical except that the Tzu pictograph leans in the opposite direction, thus emphasizing the symmetry of right and left in the using of these two vessels.

Ht. 8″. Graph Chart IA-1

With the above vessels was another single Chüeh which had the same pictograph of Tzu ("son"), but instead of Hsi it had the cyclical stem character Kuei, so that the inscription could read "Prince Kuei." This vessel was not obtained by the Museum.

4 NB.4032 KU Slender wine beaker PLATES IV, XV A, XXXVII 2

This vessel has three zones. The foot zone is of animal mask décor with very unusual open-work design. In the centre is the usual small zone with dragon or bird design highly stylized. The top zone flares in a trumpet shape, with four stylized cicada designs of frond-like shape. On the outside of this zone, below the lip, is a pictograph of a man holding a staff, surmounted by the cruciform Ya symbol, which is commonly taken to be a distinctly Shang emblem.
Ht. 10.15"; Dia. at mouth 5.6". Graph Chart IB-2

5 NB.4033 KU Slender wine beaker PLATE XV-B

This vessel forms a pair with the last object (NB.4032), and is identical in every respect. It has the same pictograph, and in the same place. Usually the graph on a Ku is placed inside the base-rim.
Ht. 10.15"; Dia. at mouth 5.6". Graph Chart IB-1

6 NB.4034 KU Slender wine beaker PLATES III, XXXVII-3

This vessel likewise has three zones, but there is no open-work design, nor is there any inscription. The base zone has a semblance of a conventionalized elephant head. Otherwise it is similar to the above pair of Ku, NB.4032 and 4033.
Ht. 10"; Dia. 6"

It would be difficult to find more beautiful specimens of bronze casting than these Ku vessels. Their technical excellence is superb, their simplicity of form is delightful, and the masterly delineations of stylized animal motifs, with their atmosphere of mystery and other-worldliness, carry one back some thirty centuries in a spirit of adventure and discovery. Bronze objects of various types were sometimes inlaid with turquoise or lacquer or jade, but none with gold or silver in Shang times. When new, the bronze would show up the décor relief in striking manner; but now, with the maturity of age upon it the patination of autumn tints gives it an added richness of colour.

7 NB.4027 KUANG Ewer-shaped vessel PLATE V

This vessel is popularly called a Hu-t'ou-yi (tiger-head ewer). It is elliptical in shape, with a monster-form handle at one end, and a trough-like spout at the other. Its form is such as to preclude its being placed over a fire, yet it was used for pouring liquids. At least one such Kuang has been found with a pipe-shaped ladle fitted into a handle groove in the vessel, and with two compartments inside, obviously intended for two kinds of liquids. The surface of the vessel is covered with many animals, including an elephant, with trunk uplifted, on each side of the bowl. The full-length cover has a bovine head, with two bottle-shaped horns, over the spout end; while a feline head with prominent ears is at the handle end. There was no inscription on the vessel.
Ht. 8"; L. 10"

8 (Supplementary) KUANG Ewer-shaped vessel PLATE VII

Similar to the above, and found with it in the excavation. It was inside a bronze vessel which was in fragments, but the Kuang itself was in excellent condition and free of encrustations, except for remains of fine silk which adhered to it. It was covered with the most interesting animal figures, but its outstanding characteristic was the elephant head in the round at the front end of the cover. The trunk was upturned and there was a pair of short tusks. The large ears were upright, and a snake was curled round each, with its head entering the ear. The Museum did not obtain this Kuang, which it is said was ultimately sent to Japan. There was no graph on the vessel.
Ht. 7"; L. 7.5"

9 (Supplementary) YU Wine pail PLATE VIII

This wine container is elliptical in form, with a swing handle suspended from the flat sides of the vessel, instead of the usual handle which is suspended from the small ends. The spurs of the cover which are usually in alignment with the handle are in their proper place at the small ends of the cover. The handle ends are in the form of animal heads. The vessel is covered with the usual animal designs in low relief. In one end of the cover a crack had developed which was repaired by a double-pointed rivet, using a method which is in general practice today. The repair was covered with an ancient scaly patina such as covered the whole vessel. On one of the spurs of the cover are two pictographic characters meaning "son" and "rain" (Tzu-Yü). Tzu may be a homophone for Szu, that is, "supervisor," and might well refer to an official whose duties were connected with rain—a very important matter in those early days. Two pipe-shaped ladles often found with this type of vessel came from this excavation (Pl. XIII). This vessel was not obtained by the Royal Ontario Museum, but came into the possession of Sir Neill Malcolm.
Ht. excluding handle 10.25"

10 NB.4028 CHIH Wine beaker PLATES IXA, IXB

This short beaker is elliptical in form, and has a cover, which is unusual for this type of vessel. It is covered with stylized animal designs in low relief, which are clearly seen in the accompanying line-drawing (Pl. IXB). The central zone on the side of the vessel carries a ram's-head mask of which the two horns are prominently depicted. The upper band has two birds (or possibly K'uei lizards) on each side, set off with an inverted fringe of stylized cicadas. The band on the base-rim has a pair of bird forms on each side, all with reverted heads. The cover is decorated with a pair of ram's heads full-faced; or each quarter could be interpreted as a silhouette of four heads, as could be the figures in the central zone. The knob of the cover carries five comma-shaped spirals, with a circle in the centre; the background of the whole vessel is filled with the "thunder" meander. There is no inscription on this vessel.
Ht. over all 5.15"; Dia. at elliptical top rim 2.9" × 2.4"

11 NB.4029 LEI (or HU) Covered wine container PLATE X

Usually this type of vessel is quite large, but all have similar characteristics: two side handles at the shoulder, and one in the centre close to the base, with round bosses in relief around the shoulder, and a cover with knob. A similar Lei of larger size, and without the cover, is found in Group II, the Halberd-Bearer (Pl. XXXVIII). The inscription inside the upper rim is Tzu ("son") with Mu ("mother") underneath. The inscription inside the cover is the same, except that the "mother" pictograph is lacking the two decorative hooks on the top of the head (Graph Chart IA-6).
Ht. over all 5.75". Graph Chart IA-5, 6

12 NB.4022 TING Miniature tripod bowl PLATE XI-A

Two ears spring from the upper rim and two simple lines encircle the upper part of the bowl, which is the only decoration. Inscribed inside the vessel is the pictograph for "son" (Tzu) or "prince," and this links it up with the many other objects of this excavation which carry the "son" pictograph. There is nothing to show that the smallness of this vessel would suggest a series of graded sizes; neither is it a unique specimen, for a similar small Ting is found in Group VII, the Prince (Tzu) of Kung set (Pl. LXXVIII).
Ht. over all 2.3"; Dia. 1.7". Graph Chart IA-4

13 NB.4025 TOU Hemispherical ladle PLATE XII-A

With socket for wooden handle. The pictograph for "son" is inscribed in a panel of a stylized cicada, and this is surmounted by a "tiger" mask. "Son" and "Tiger" are name marks of the person to whom the Elephant Tomb is dedicated. (See Appendix D.)
Depth 2.5"; Dia. bowl 3.25", handle socket 1"; L. 5.7". Graph Chart IA-7

14 NB.4156 TOU Hemispherical ladle PLATE XII-B

With socket for wooden handle. No decoration or inscription. It has been suggested that this and NB. 4025 above are measuring vessels, but so far this cannot be proved.
Dia. bowl 2.5"; L. 3.7"

15 NB.4023 TOU Pipe-shaped ladle PLATES XIII-D, XXXVII-6

Type used with Kuang and probably Yu vessel. This object is so balanced that when inverted the bowl rests on the rim of the vessel allowing the liquid drops to fall into the vessel. This ladle, or small dipper, gives its name to Ursa Major, the Northern Dipper (Pei-tou) and to the Southern Dipper (Nan-tou). It has a low-relief animal design incised at the handle end, culminating in a ram's head in the round, about one-third of the length from the handle end. The bowl is corrugated with vertical lines.
L. 8.25"

16 NB.4024 TOU Pipe-shaped ladle PLATE XIII-A, B, C

Similar to the NB. 4023 above, except that the decoration is different. This is a striking example of naturalistic animal style. At the handle end there are two columns of animals in apposition, beginning with a pair of tigers, then elephants, bears, stags, two other

pairs not distinguishable, and a pair of birds, culminating in a dragon with two bottle-shaped horns in the round. Then follow a dozen lines incised longitudinally towards the bowl end, where two more columns of animals are depicted: tigers, bears, stags, elephants, and fish. The bowl is plain.
L. 9.6"

17 NB.4066 KU Slender wine beaker PLATE XIV

This vessel is listed in this group because it was excavated about twenty feet north of the Elephant Tomb, and actually may have been connected with the tomb. This graceful vessel has the usual three zones of a Ku; the upper zone carrying a frond-like design of stylized cicadas, with four snake-like animals at their base; the centre zone and the base-rim zone being decorated with animal masks and K'uei dragons. The inscription inside the base-rim is unknown, but seems to point to a dedication associated with a Shang queen.
Ht. 11.5"; Dia. at top 6.6". Graph Chart IA-8

18 (C. T. Loo Collection) FANG-YI Covered rectangular vessel PLATE XVI

It is usually spoken of as a food vessel; but more probably was a spice canister or something akin to it, for food could not readily be cleaned from the angular corners inside the bottom. Moreover, the tight-fitting cover, which is characteristic of this vessel, would also indicate this assumption, for it would prevent the aroma from being evaporated and lost. This vessel was in the collection of Mr. C. T. Loo of New York, who gave the print to the Royal Ontario Museum, which had already acquired several bronzes carrying the same pictograph. The graph is that of an outline of a man holding a staff or wand, surmounted by the Shang Ya of cruciform type. The present whereabouts of this vessel is unknown. Its patination was of a light green, and it was stated to have come from Anyang and to be of Shang dynasty period. This is probable, for it is a Shang type. The Museum has among its Anyang stone objects a cover of one of these vessels carved in white marble.
Ht. 11.5"; W. 5.5"; L. 6.75"

WEAPONS

1 NB.4040 KO-14 Jade halberd PLATE XVII-A

This was obtained in 1933, together with jade Ko NB.4038 and bronze Ko's NB.3979, 3980, 3975, 3974, 3977, 3976, and 3981, and various other objects including the bronze Kuang decorated with elephant designs, NB.4027 (Pl. V). (See *Illustrated London News*, May 18, 1935; extra Plate IV, Fig. 2, in colour.) The object is of cream-coloured jade of good quality, and is complete. Three jade halberds were found together: This and the following (NB.4038) were obtained by the Museum. Of the third, the present where-

abouts are unknown, but photographic prints of it are on file; it is of white jade, 12 inches in length.
L. 12.5″

2 NB.4038 Ko-15 Jade halberd PLATE XVII-B
This was found with the jade Ko NB.4040 above; the same description applies to both. (See *Illustrated London News*, April 20, 1935, p. 640, Fig. 12.)
L. 13″

3 NB.3979 Ko-61 Halberd PLATE VI-B
The butt design was reproduced in colour in the *Illustrated London News*, May 18, 1935 (extra Plate IV, Fig. 6). The butt of the Ko is inlaid with turquoise in an animal-head design, of which the eye on the obverse side of the object is rounded, while that on the reverse side is missing. Congealed bronze patches of silk cloth wrapping are evident on the obverse side. Boldness and firmness of line indicate the skill of the artisan.
L. 16.5″. Appendix E, Fig. 2

4 NB.3980 Ko-64 Halberd
Description and particulars noted in Ko-61 above apply to this object, except that this is not inlaid, and is much smaller.
L. 12.5″. Appendix E, Fig. 3

5 NB.3975 Ko-70 Halberd PLATE XX
This Ko has a pictograph on both sides of the heel. On one side is the pictograph of a man carrying a halberd on his shoulder. On the other side is a naturalistic pictograph of a tiger. From the tomb there also came a flat adze, bearing the same two graphs (NB. 3978, Pl. XXI), which was reproduced in the *Illustrated London News* of April 10, 1935 (p. 641, Figs. 13, 20).
L. 8.2″. Appendix E, Fig. 4

This important Ko (NB.3975) has been carefully investigated by the Reverend Dr. J. M. Menzies, who came to the following conclusions:

(1) The subject of these pictographs was Tzu, a "son" or "prince" of the royal house in the reign of King Wu-Ting, (1324–1265 B.C.). The family name of the royal house of Shang also was Tzu.
(2) He was named Tiger.
(3) He was the court official in charge of the ceremonial halberd or Ko.
(4) He was Marquis of Yung.
(5) He was a well-known personage, spoken of in the Oracle Bone inscriptions as Tzu-Chih.

The importance of these facts is great indeed, for by them we are able to accept a dating to that period for the Elephant Tomb, that is, to about 1250 B.C. The verbatim findings of Dr. Menzies are given in Appendix D.

6 NB.3974 Ko-95 Halberd
This was obtained in 1933, together with the laurel-leaf spearhead NB.3985 (Pl. XXIIA-B), and the triangular Ko NB.3981 (Pl. XVIII). Ko-95 has a pictograph, on one side of the butt only. It is that of a scorpion, and there is ample proof in the bone inscriptions that one Tzu-Wan ("Son Scorpion") was a "son" or "prince" of Wu-Ting's reign, and might well be a close relation of Tzu-Chih, the "tiger" and halberd-bearer.
L. 10″. Graph Chart IA-9; Appendix E, Fig. 1

7 NB.3977 Ko-133 Socketed halberd PLATE XIX
This was reproduced in the *Illustrated London News* of April 20, 1935 (p. 639, Figs. 1, 2, 4; p. 641, Fig. 15). The pictograph on this halberd is of two men seated on their heels back to back, with a club held by two hands reaching down from above between them. There is no modern equivalent for this graph, and the bone inscriptions on bronze have so far not revealed anything exactly like it. On the reverse side of the butt is a deep-cast tiger mask which had been inlaid with turquoise, fragments of which remain.
L. 8″. Appendix E, Fig. 5

8 NB.3976 Ko-138 Socketed halberd PLATE VI-A
This was reproduced in the *Illustrated London News*, May 18, 1933 (extra Plate IV, Fig. 1). Part of the wooden handle, impregnated with copper oxide, still remains both above and below the socket. Marks of straw matting cover the object on both sides. The blade is well made but not so carefully finished as NB.3977 above. The graph is that for "son" or "prince," and is found on the butt on the obverse side only. The Tzu ("son") character is found on many of the objects from this tomb, which in some cases at any rate would spring from the Tzu-Chih dedication of the tomb, or from the family name of Shang. This Tzu character is found on the ladle NB.4025, on the Ting vessel NB.4022, on this Ko, and in association with other characters.
L. 8.75″. Graph Chart IA-3; Appendix E, Fig. 6

9 NB.3981 Ko-160 Triangular halberd PLATE XVIII
This was reproduced in the *Illustrated London News*, April 20, 1935 (p. 641, Fig. 20). This halberd has two lashing holes. The pictograph is of a scaled K'uei dragon; it is found on one side of the butt only, the other side being plain.
L. 7.5″. Appendix E, Fig. 7

10 NB.3985 Socketed spearhead PLATE XXIIA-B
This is of laurel-leaf shape. L. 9.6″; W. blade 2.2″

11 NB.4037 Jade spearhead
Leaf-shaped. L. 4.25″; W. 2″

12 NB.3986 Halberd or spear butt PLATE XXIII-A
Two-pronged. L. 5.4″

13 NB.3987 Halberd or spear butt PLATE XXIII-B
Two-pronged. L. 4.4″

14 (Supplementary) Spear butt PLATE XXIII-C
Four-pronged. This particular butt did not come into the possession of the Museum, but the writer examined and photographed it, and noted its provenance. It was wrapped in many layers of cloth, probably of silk, some coarse and some fine. These wrappings, entirely solidified by corrosion, still adhered to the butt. There was a small hole in the socket through which it was nailed to the staff; and there had been a loop above one of the prongs, possibly for attachment of thong.
L. over all 5.75″, prongs 3″; Dia. socket 1.4″

Many of these pronged butts have been found, and it has been assumed that they were attached to the staff to permit thrusting the staff upright in the ground. The assumption is based on the fact that pictographs of halberds almost invariably have a pronged butt, usually of three prongs. The pronged butt was probably used in this manner, but since many of these butts are highly decorated it is also likely that a secondary use was as an auxiliary weapon.

15 NB.3988 Finial for halberd top
This is in the shape of a bear, and would be attached to the tip of the staff which protruded from the halberd socket. A halberd with such a bear-shaped ornament in position, and also of the Shang period, is in the collection of the Museum.
L. nose to tail 2.6″

16 NB.6228 YÜEH Socketed axe-head PLATES XXIIA-A, XXIIB
This axe-head is probably from the Elephant Tomb. It is decorated with turquoise inlay and the pictograph of a standing man holding a staff, surmounted by the Shang cruciform Ya symbol such as that on the two small bells (NB.4020, 4021) and the two Ku (NB.4032, 4033).
L. 7.6″

17 NB.3982 YÜEH Socketed axe-head PLATE XXIIA-C
The socket for hafting is long, the blade is celt-shaped, and the three knobs are obviously relics from a development of the Ko or halberd.
L. blade 5.5″, socket 6.5″

18 NB.3983 YÜEH Miniature axe-head
This axe-head has a socket for hafting. Cloth patches adhere.
L. 2.25″

19 NB.6417 PEN Socketed adze
This blade was probably a Ming-ch'i for funeral use. It has a sunken design of cicada and animal mask.
L. 5.6″; W. 1.25″

20 NB.3978 PEN Adze or plane blade PLATE XXI
This tool is flat and slightly tapered. It has no socket. The two pictographs on it are exactly those that are on the halberd NB.3975 (Ko-70, Pl. XX), that is, deeply sunk graphs for "tiger" and "halberd-bearer." (See Appendixes D and E.)
L. 5″; W. 1.25″

21 NB.3984 PEN Adze PLATE XXIIA-D
Socketed, and quite small. L. 2.75″

KNIVES

1 NB.3960 Knife with dragon handle PLATE XXVI-1
The blade is curved with point upturned in a peak. The cutting edge is thin, the back broad and forming a ridge. The handle is formed by a stylized K'uei dragon with open mouth, and eye in relief; the tail curled round to form a loop. It has been suggested that the sharp upturned point of the knife may have been used as a fork. Green patina, with traces of silk cloth adhering.
L. 7.3″

1a NB.6415 Knife with dragon handle
This knife is from the Elephant Tomb, but it was received after the others were listed. It is similar to NB.3960, in size, form and handle, but the dragon's crest is curled up instead of stretching out horizontally.
L. 7.3″

2 NB.3961 Knife with dragon handle PLATE XXVI-2
Similar in style to the above knife, but the blade point is somewhat more angular. The dragon is similar to that of NB.3960 above, but is more carefully decorated. The tail is curved around but not closed to form a loop.
L. 6.7″

3 NB.3973 Handle of a knife PLATE XXVI-3
This is in the form of a fish with eyes in relief, and scales and other details indicated by incised lines. The tail is forked, and a portion of the knife blade is still attached. A portion of the mouth is missing. A restoration following the dotted outline has been made to approximate the form and size of the original knife.
L. handle 2.6″

4 NB.3971 Long slender knife PLATE XXVI-4
An authority on early Chinese bronze has suggested that this knife may well have been a razor. It has a slightly curved blade. The handle is thin, flat on one side and convex on

the other, and was probably socketed against wood on the flat side. A transverse groove near the end obviously was used in the winding of the cord which probably covered the whole handle.
L. 7"

5 NB.3968 Knife — PLATE XXVI-5

This knife is similar to No. 14 (NB.3966) but is much smaller and is decorated with small diagonal incised lines instead of herring-bone pattern. The handle has a ring end, and an opening throughout the greater part of its length. The knife is much encrusted, and the point has obviously broken down through corrosion.
L. 5.6"

6 NB.3972 Large sacrificial knife — PLATES XXV-A, XXVII-6

This knife, which was probably used in sacrifices, is heavy and well-formed, with an upturned point and a short stub handle, which, the encrustations show, had been inserted in a wooden handle. The back of the blade is thick, ridged, and decorated with a raised criss-cross design. Light green patina.
L. 15.5"

7 NB.4050 Large sacrificial knife — PLATE XXVII-7

This knife came from Anyang and probably from the Elephant Tomb; it was doubtless used in the sacrifices. It has a long curved blade with sharp upturned tip and broad back curving sharply in towards the cutting edge. The base of the blade is broad and juts out from a long straight tang. It also has a stub handle end, and the arc formed by the original wooden handle is still defined. On either side of the blade, near the base, are incised pictographs. That on the obverse (a) is a hand grasping the pictograph for "self," and that on the reverse (b) is a cruciform Ya with two parallel wavy lines which may be intended to represent running water.
L. 12.7"

8 NB.4049 Sacrificial knife — PLATES XXV-B, XXVII-8

This knife has a broad curving blade with upturned point, serrated flange along the back, and a panel of incised animal-style decoration running lengthwise below. The stub handle obviously had been inserted in wood. Jade-green patina with areas of olive green and considerable encrustation.
L. 12.25"

9 NB.3964 Slender knife — PLATE XXVII-9

This has a long slender blade with rounded up-turned tip, the back continuing its curve along the handle. The lower part of the handle projects and is notched where it joins the blade. The handle is ridged lengthwise and terminates in an oval ring with a small projection at the upper edge.
L. 10.5"

10 NB.3969 Knife — PLATE XXVII-10

The back of the blade of this knife is broad and ridged, the point is slightly upturned and rounded. The cutting edge is corroded and chipped. The handle is almost flat and continues the curve of the blade, terminating in an oval ring with a small opening. There is a slight depression where the blade begins at the handle. Green patina with patches of rust and purple.
L. 9"

11 NB.3970 Straight knife — PLATE XXVIII-11

This knife has a broad blade with a thick back, slightly upturned at the point thus widening the blade. The cutting edge is almost straight, with angular butt, and the handle has an oval ring terminal at the end, with a lengthwise ridge in the centre. The knob of bronze at the extreme end of the handle is probably excess remains from the casting. Well-preserved fragments of woven cloth adhere to the blade.
L. 11"

12 NB.3962 Knife — PLATE XXVIII-12

This knife is similar in shape to the knife coins of Late Chou, but is said to have come from the Elephant Tomb. It has a broad slightly curved blade with slanted tip. The butt is cut square, the upper portion continuing in a slender handle with three lengthwise ridges, terminating in a ring with a small prong in the centre of one side—probably excess remains from the casting. A small piece of bronze is missing at the lower tip of the blade. Green patina with touches of blue.
L. 9.5"

13 NB.3967 Large knife — PLATE XXVIII-13

The back of the blade of this knife is in a single ridged curve with the handle. The cutting edge is coarse and tapers to meet the back at a slightly upturned point. The handle is thick and heavy, with a ring terminal decorated with three bosses, one at the end and one at each side. Herring-bone decoration in two rows with longitudinal opening in the centre of the handle. Green patina with touches of blue and considerable encrustation of clay. The knife had been broken in three pieces.
L. 14"

14 NB.3966 Knife — PLATE XXVIII-14

Similar to the latter knife (NB.3967), but smaller and with no bosses on the ring terminal of the handle. The handle is elliptical in section, with a lengthwise slot having incised decoration on either side. Bright green patina.
L. 11.5"

15 NB.4047 Knife — PLATES XXIV, XXVIII-15

The handle of this knife is elliptical in section, with a lengthwise slot surrounded by a beaded decorative border on either side. The handle terminates in a horse's head, entirely

in the round, wearing a bridle decorated with a globular beading design. The head is hollow and probably contained a ball of bronze as a jingle. The eyes are perforated and the mouth and throat slotted. There is a spur on the lower side of the knife between the handle and the blade. Bright green and brown patina. Several other bronze objects with similar horse-head motifs come from the Elephant Tomb.
L. 11.5"

16 NB.3965 Knife — PLATE XXVIII-16

Similar in general style to the previous three knives (NB.3967, 3966, 4047), but the handle is plain. The back of the blade and the handle are in one arched curve. The cutting edge curves up to meet the back at the point. The under side of the handle curves out to join the blade at the butt. There is a slightly transverse ridge at the butt, the handle is ridged lengthwise and terminates in an oval ring.
L. 9"

JINGLES AND BELLS

1 NB.4035 Bow-shaped jingle — PLATE I

This is slightly curved in arc form, with a horse's head in the round at each end. These ends are tubular, and have a pellet of bronze in each head, which emits a tinkling sound when the object is moved. It has no decoration, but companion jingles of the same size and type are profusely inlaid with turquoise. (See below NB. 4036, 6414; also Pl. XXXVI.) By the marks of thongs at the two angles, where the central arc and the two ends are joined, it is assumed that the object was lashed to a base, but for what utilitarian purpose is a matter of conjecture. (See Appendix G.)
L. 14"

2 NB.4036 Bow-shaped jingle — PLATE XXXVI

Similar in shape and style to the latter object, except that this one is decorated with turquoise inlay.
L. 15"

3 NB.6414 Bow-shaped jingle

This is similar in shape and size to the latter two jingles, and is also decorated with inlaid design. There is no inscription or pictograph on any of these three jingles, and they are all of fragile construction, very liable to be damaged unless handled lightly.
L. 14.5"

4 NB.4021 LING Bell — PLATE XI-B

This bell is elliptical in shape, with plain flanges on the two pointed ends. On the sides of the bell there is a pictograph in relief of a standing man holding a staff or wand, and surmounted by a Shang cruciform Ya symbol. This pictograph is found on the pair of Ku (NB.4032, 4033) and other objects from this tomb. The bell is open at the top, over

which is a semicircular handle, but there is no sign of clapper attachment.
Ht. 4.3"; Dia. at rim, long axis 3.5", short axis 2.75". Graph Chart IB-5

5 NB.4020 LING Bell — PLATE XI-A

Elliptical in shape and similar to the latter Ling, but is much smaller, and has the same pictograph, but only on one side.
Ht. 2.1". Graph Chart IB-6

VARIOUS OBJECTS

1 NB.4041 Chariot fitting — PLATE XXXVII-1

This is a long flat bar with ends cut at an angle, and a broad tongue-like extension in the centre of the lower side. On this extension is an animal mask with stub horns, and on the long bar are two attenuated lizards in low relief. On the back of the bar are loops for attaching thongs.
L. 6.1"

2 NB.4042 Harness plaque

This plaque is in the form of an inverted isosceles triangle with rounded base, and surface slightly convex. Socket at tip 1.65" deep, and with loop at back for attachment. Two K'uei dragons in low relief.
L. 5.2"; W. 2.4"

3 NB.4043 Harness plaque

Similar in general to NB. 4042, but in lower relief, and slightly smaller.
L. 5"; W. 2.3"

4 NB.4044 Harness plaque — PLATE XXXVII-5

This is in general similar to the previous two plaques, but larger, with heavier relief and a plain background. There were no incised details on the dragons of this plaque.
L. 5.5"; W. 2.5"

5 NB.4045 Terminal socket — PLATE XXXVII-4

Square in form, with two K'uei dragons in relief, and a square hole for connecting pin or bar.
L. 6"; W. 1.3"

6 NB.4046 Terminal socket

Identical with NB.4045 with which it forms a pair. L. 6"; W. 1.3"

7 NB.3990 Slide boss — PLATE XXXIV-8

Frog-shaped, with a loop at the back. L. 1.15"

8 NB.3991 Slide boss PLATE XXXIV-9
Frog-shaped; it forms a pair with NB.3990, above. L. 1.15″

9 NB.3992 Slide boss
Frog-shaped, with a loop at the back. L. 1.2″

10 NB.3993 Slide boss PLATE XXXIV-2
Cicada-shaped, with a loop at the back. L. 1.15″

11 NB.3994 Slide boss
Cicada-shaped. L. 1.1″

12 NB.3995 Slide boss PLATE XXXIV-3
This is in the shape of a donkey head in the round. L. .85″

13 NB.3996 Slide boss PLATE XXXIV-4
Convex in shape, with a five-comma design in low relief. Dia. 1.3″

14 NB.3997–4019 23 slide bosses PLATE XXXIV-5, 6, 7
These have a deeply incised mask design inlaid with turquoise, and a loop at the back. Dia. 1″ more or less.

15 NB.4048 Chariot fitting PLATE XXXV
A shaft end with a hollow socket and a dragon and cicada design in low relief. L. 6.5″; W. 3.3″

16 NB.5325 Socketed staff finial PLATE XXXI-D
This finial is of a waisted form with rounded top. Stylized cicadas surmount animal masks on the sides, and an animal mask of tiger type is on the top, all in cast incised lines. There is a small hole through the middle for a pin. It is of heavy metal.
L. 2.4″; Dia. 1.5″

17 NB.5326 Socketed staff finial PLATE XXXI-C
Similar to NB.5325, above. There is a small hole through the middle for a pin. It is of heavy metal.
L. 2.4″; Dia. 1.5″

18 NB.5327 Axle-cap PLATE XXX-A
Tapering, with a flattened end, on which is an incised (cast) tiger mask. There are dragon designs at the wide end, surmounted by stylized cicada designs. Small hole through upper portion, and slits cut below. Made of heavy metal.
L. 6.1″; Dia. 1.95″

19 NB.5328 Axle-cap PLATE XXX-B
Tapering, with a flattened end, on which is a six-pointed star within a circle. Decorated

with dragons and cicadas. There is a small hole through the upper part, and slits cut below. Similar to NB.5327 above, but not exactly the same.
L. 5.8″; Dia. 1.85″

20 NB.5329 Staff end PLATE XXXI-B
Tubular with four prongs on one end, decorated with deeply incised and stylized K'uei dragon and bird forms. Made of heavy metal.
L. 8.05″; Dia. 1.5″

21 NB.5330 Staff end PLATE XXXI-A
Similar in form and decoration to NB.5329, above. L. 7.95″; Dia. 1.6″

22 NB.5331 Appliqué ornament PLATE XXXIII-A
Roughly S-shaped, with an elongated end and loops on the under side. Made of light metal; possibly an eyebrow of a mammoth mask. (Cf. Pl. XXIX-A.)
L. 8″

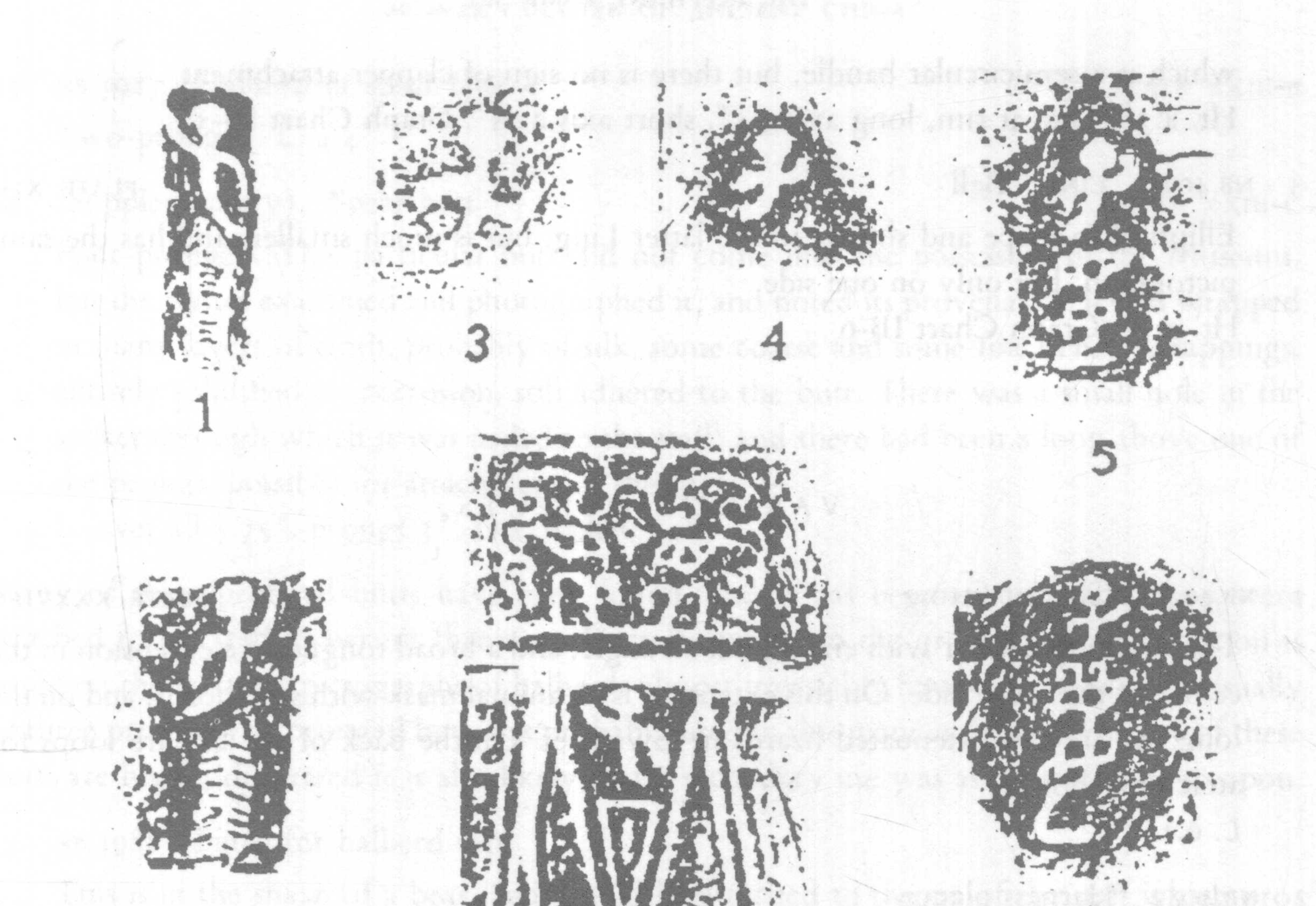
23 NB.5332 Archer's thumb-ring PLATE XXXIII-B
Light-weight ring similar to a Luristan type. Grooved on one side for a cord, and with four small holes.
Dia. 1″; L. 2.1″

24 NB.5342 Plaque PLATE XXXII-A, B
This is of an irregular elliptical form; it is convex and the upper surface is decorated with cast incised lines, with two K'uei dragon forms, and with spirals and four circles containing six dots. There is a loop on the concave under surface.
L. 5.5″; W. 1.5″

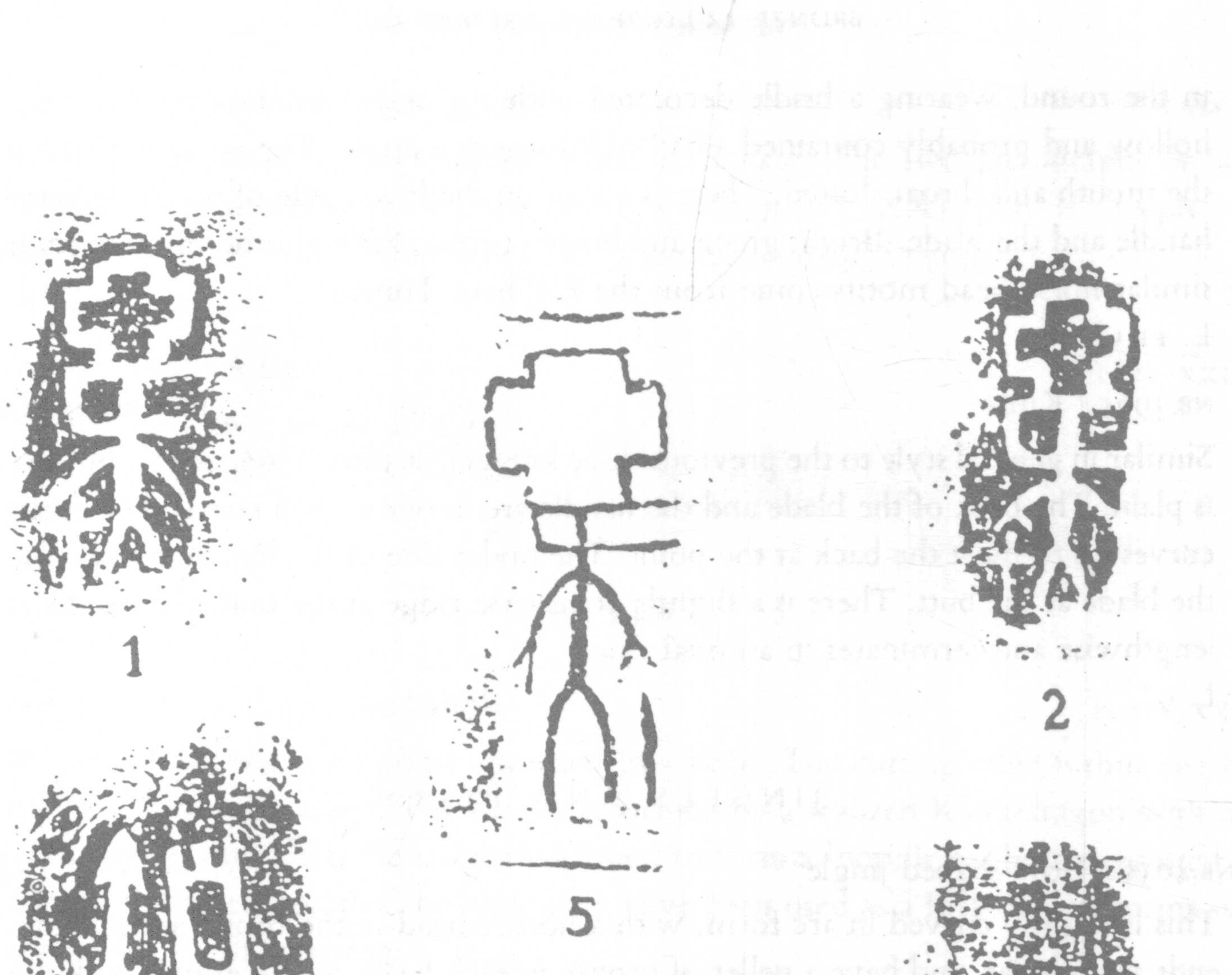
25 NB.5333 Plaque or chariot fitting PLATE XXIX-A
This plaque is formed of two curved pieces joined at right angles. One member has a four-petalled design and two bosses with a hare in relief; the other has an animal-mask composition.
Ht. 2.6″; L. 7.2″

26 NB.5334 Chariot fitting PLATE XXIX-B
This is rectangular, with a semicircular projection on one side on which are a toad and two bosses.
Ht. 3.1″; L. 6.6″

27 NB.6418 Chariot ornament
This is a narrow oblong plaque with a shelf protruding from the centre at right angles. It is decorated with four K'uei dragons. At the back are two loops for tying.
L. 6.25″; Ht. 1.25″; W. 1.75″



GRAPH CHART IA 1. Chüeh: NB.4031; p. 25. 2. Chüeh: NB.4030; p. 25. 3. Ko: NB.3976; p. 31. 4. Ting: NB.4022; p. 28. 5. Lei: NB.4029 (cover); p. 28. 6. Lei: NB.4029 (vessel); p. 28. 7. Tou: NB.4025; p. 28. 8. Ku: NB.4066; p. 29. 9. Ko: NB.3974; p. 31. 10. Yu: NB.3222; p. 78 (possibly Group II or III)



GRAPH CHART IB — 1. Ku: NB.4033; p. 26. 2. Ku: NB.4032; p. 26. 3. Ku: NB.4063; p. 97 4. Ku: NB.4064; p. 98 (this and its companion No. 3 may possibly belong to Group II or III). 5. Ling bell: NB.4021; p. 36 6. Ling bell: NB.4020; p. 37. 7. Yang-t'ou spear: NB.4054; p. 85 (possibly Group II)



PLATE VIII. Wine pail of the Yu type (Supplementary, p. 27)



PLATE VII. Wine ewer of the Kuang type, with elephant-head cover (Supplementary, p. 27)



PLATE IXB. Line-drawing to show decoration on NB.4028 (Plate IXA)



PLATE IXA. Covered wine beaker of the Chih type (NB.4028; p. 27)



PLATE XI—A,B. Bells of the Ling type (NB.4021,4020; pp. 36, 37). C. Miniature bowl of the Ting type (NB.4022; p. 28)

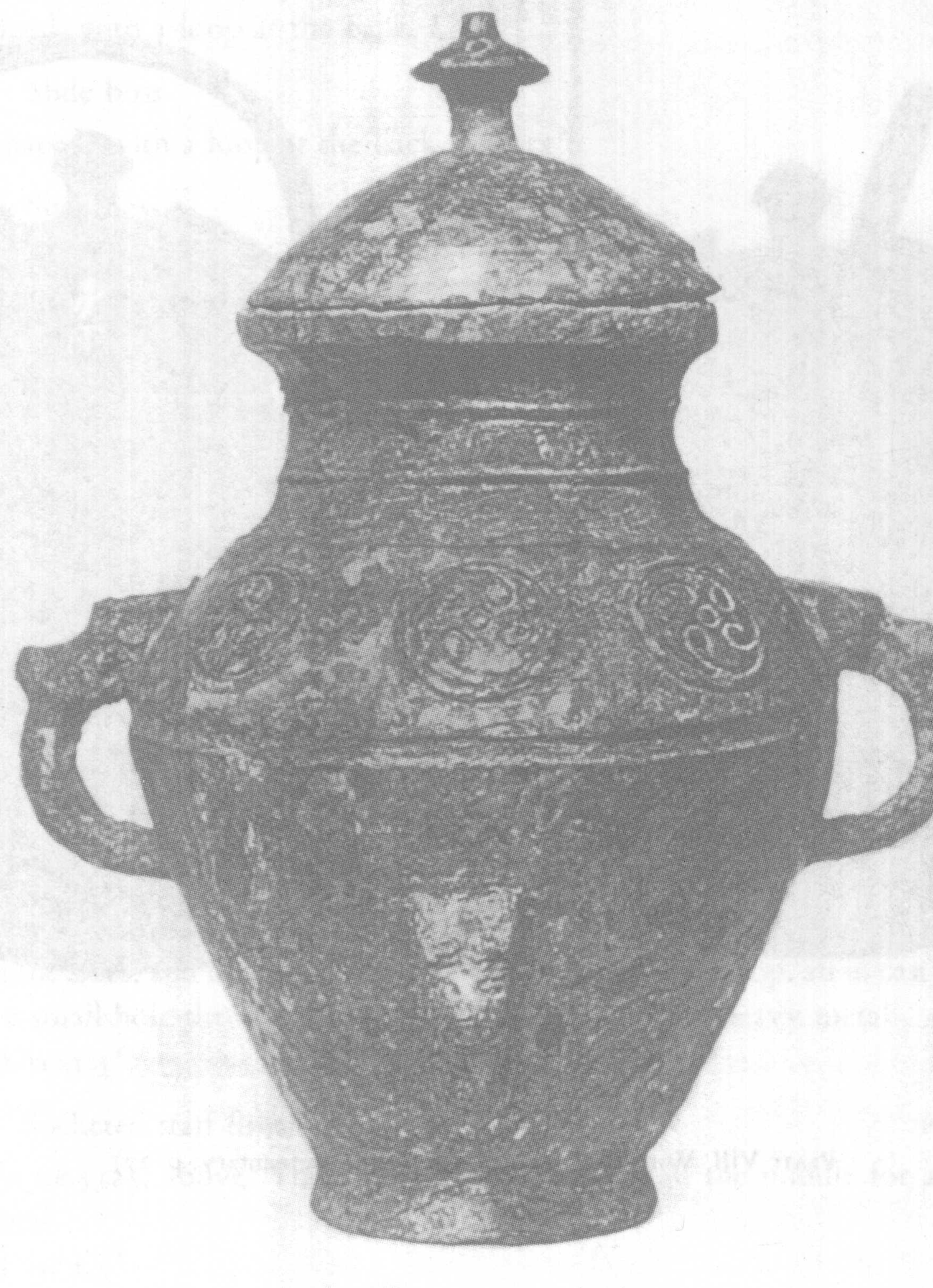


PLATE X. Covered wine beaker of the Lei type (NB.4029; p. 28)

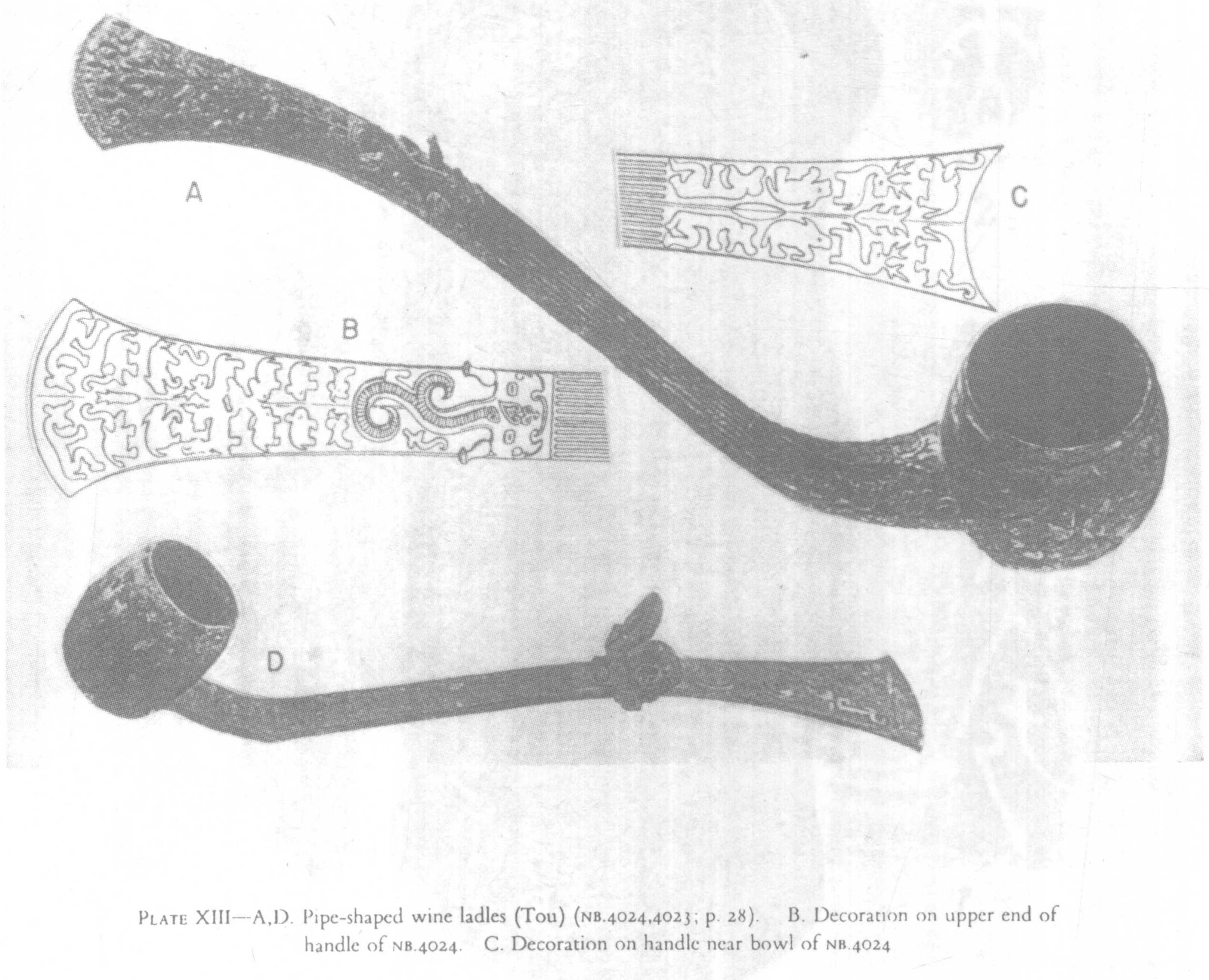


PLATE XIII—A,D. Pipe-shaped wine ladles (Tou) (NB.4024,4023; p. 28). B. Decoration on upper end of handle of NB.4024. C. Decoration on handle near bowl of NB.4024



PLATE XII. Hemispherical wine ladles (Tou) with socket for handle (NB.4025,4156; p. 28)



PLATE XV. Pair of wine beakers of the Ku type, with inscription (NB.4032.4033; p. 26)



PLATE XIV. Wine beaker of the Ku type (NB.4066; p. 29)

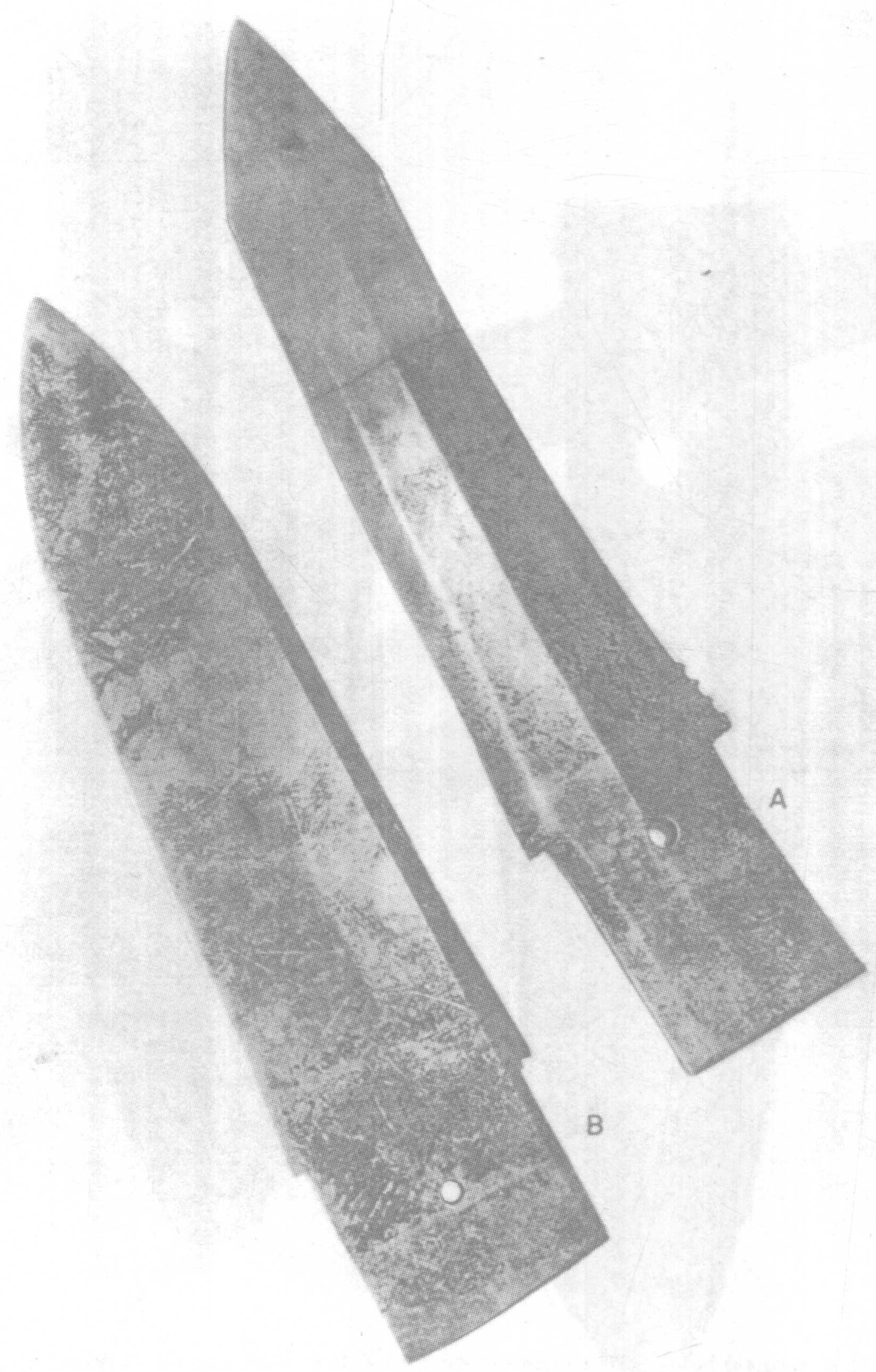


PLATE XVII. Jade halberds of the Ko type in reverse aspects (NB.4040, 4038; pp. 29, 30)



PLATE XVI. Covered rectangular vessel (Fang-yi), with inscription
(C. T. Loo Collection; p. 29)

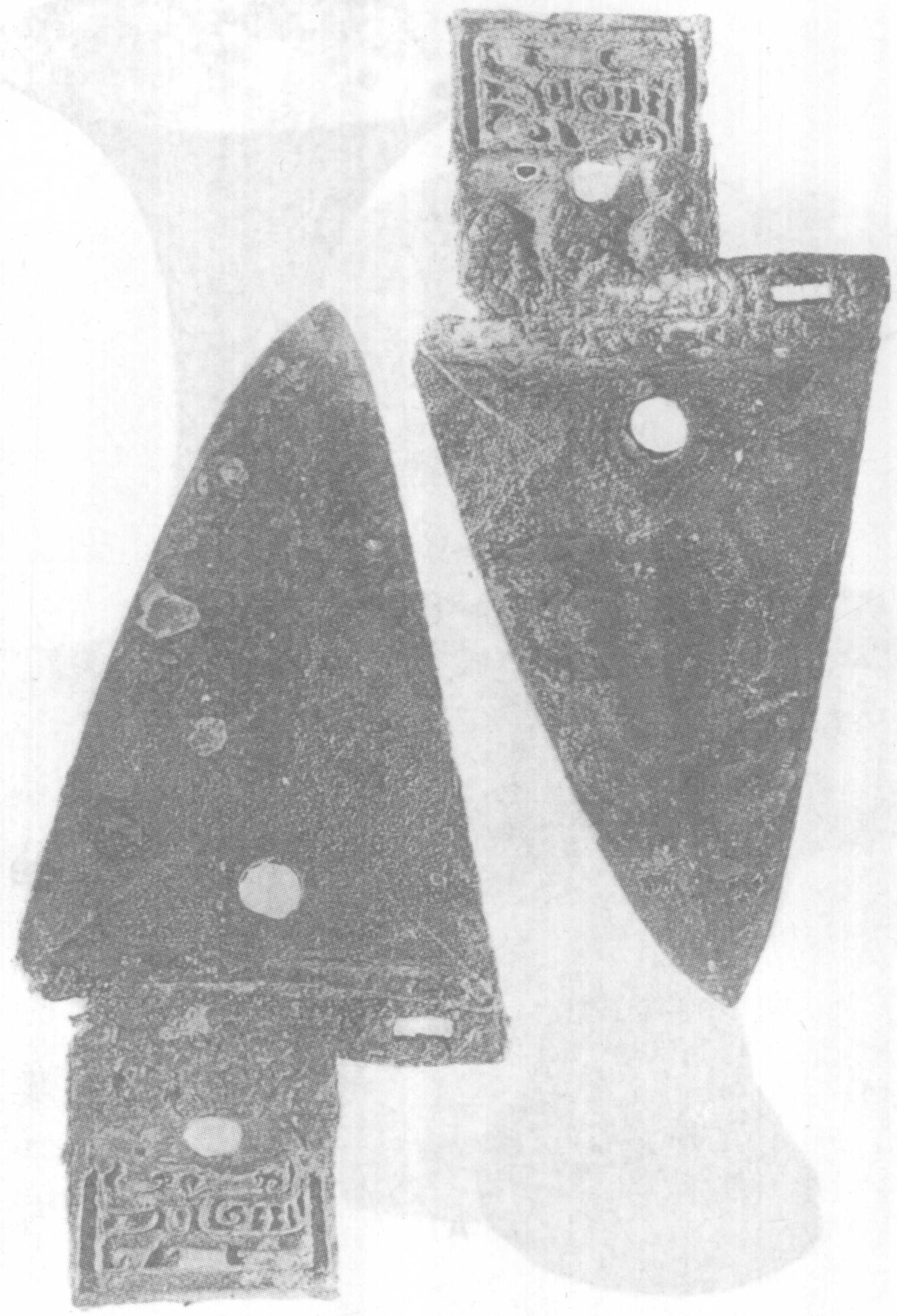


Plate XVIII. Triangular halberd (Ko), with lashing holes (NB.3081; p. 31)

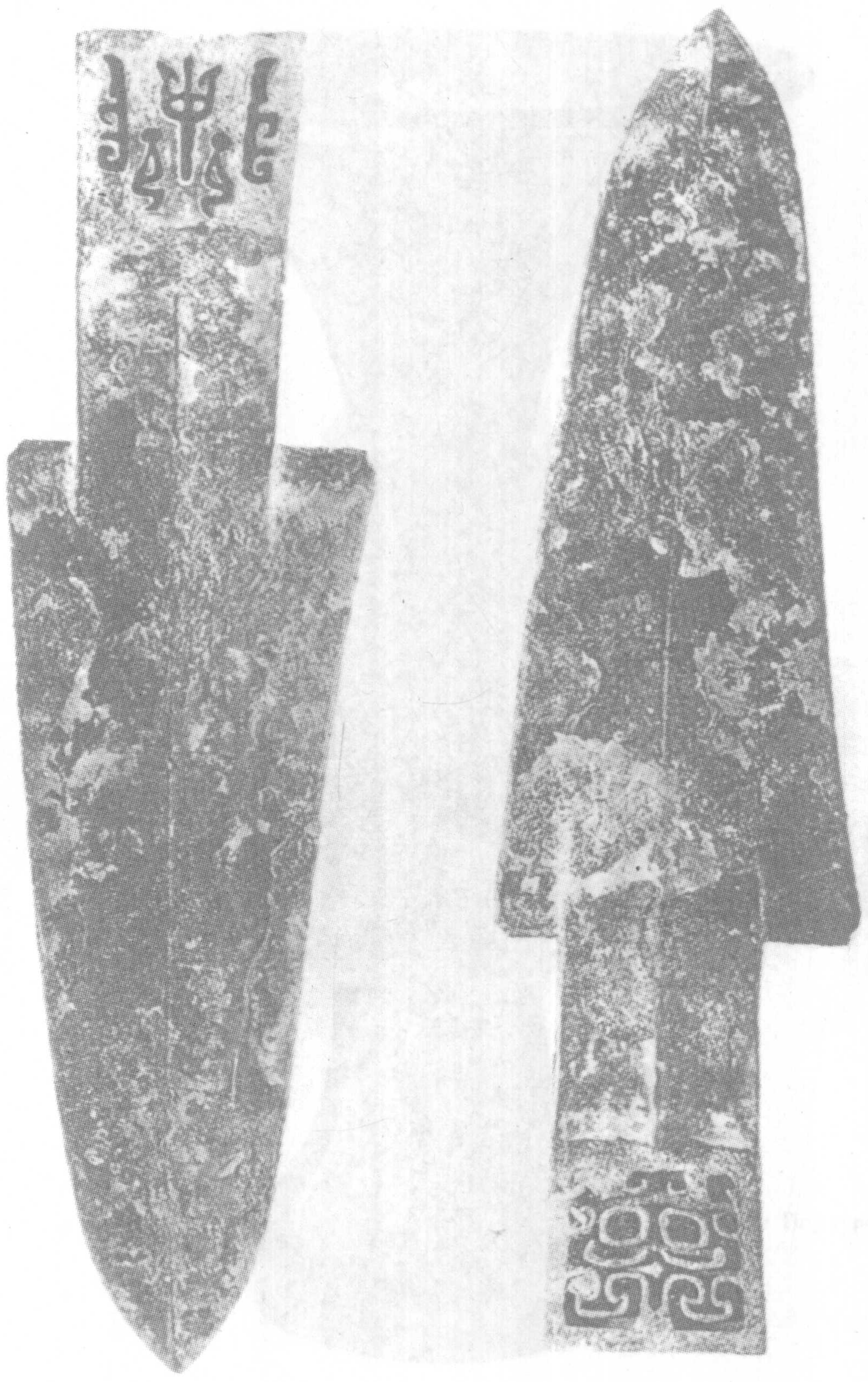


Plate XIX. Halberd (Ko), with socket for hafting: obverse (*left*) and reverse (NB.3977; p. 31)

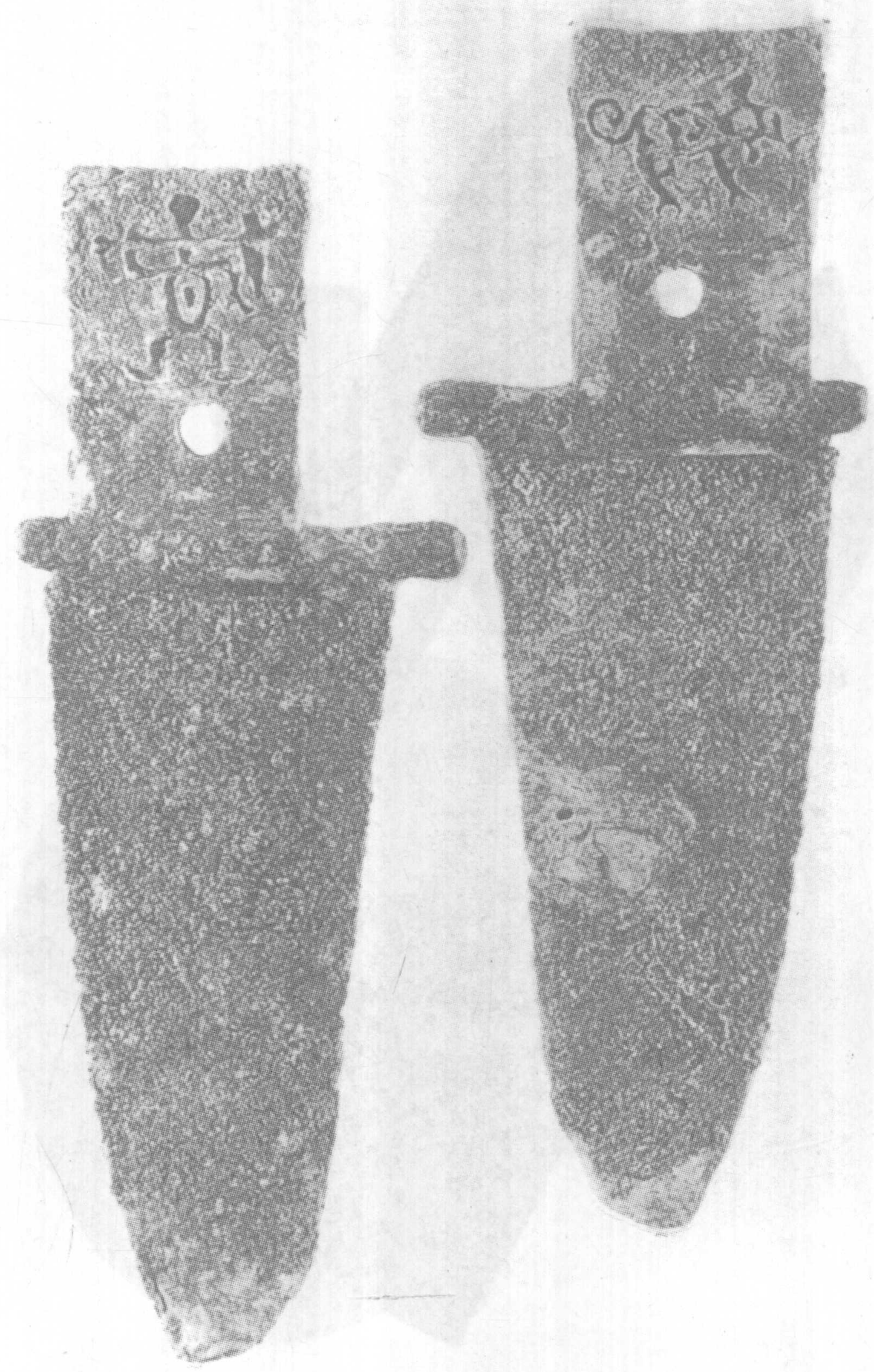


Plate XX. Halberd (Ko), with lashing hole: obverse (*left*) and reverse (NB.3975; p. 30)

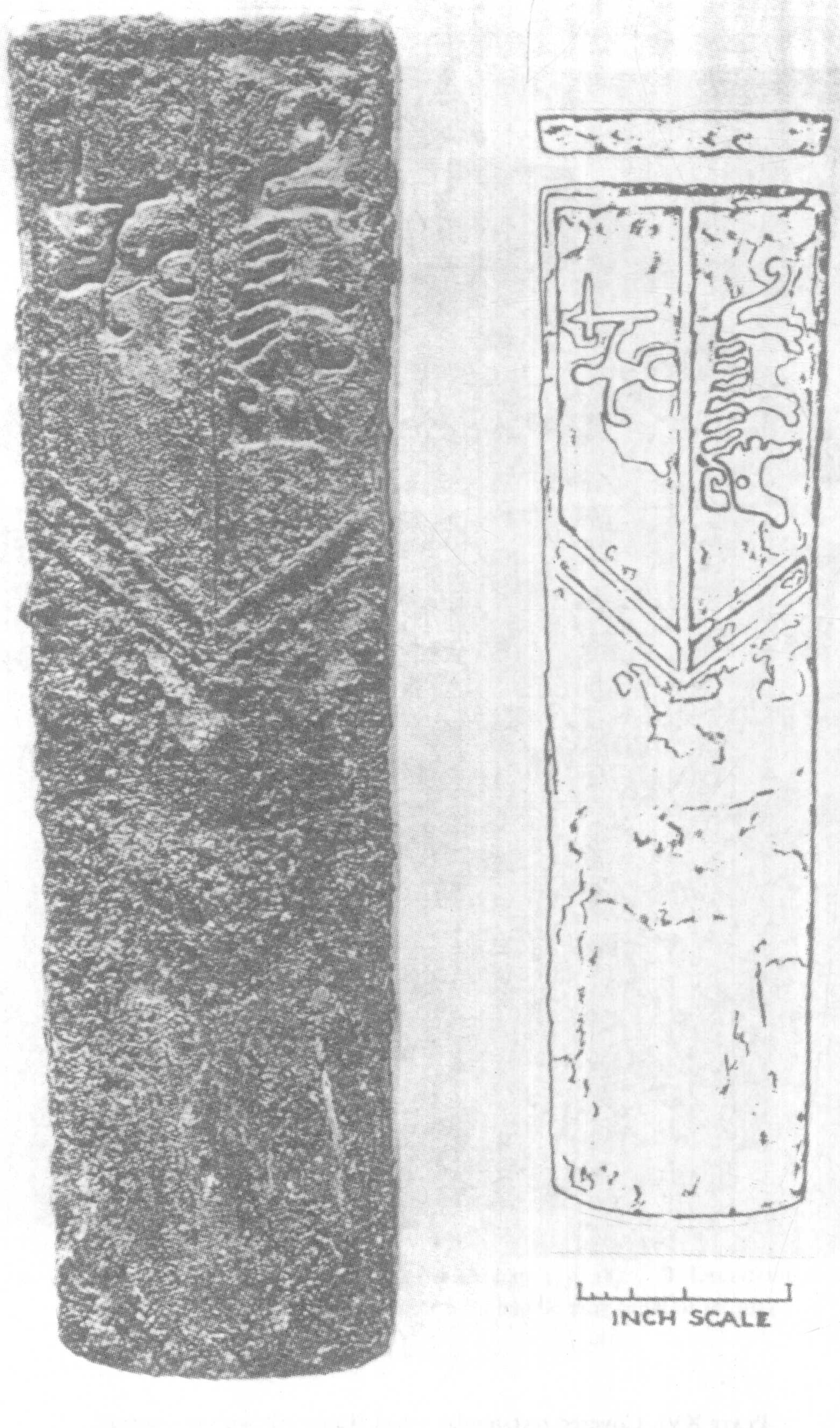


Plate XXI. Flat adze (Pen), with inscription (NB.3978; p. 33)

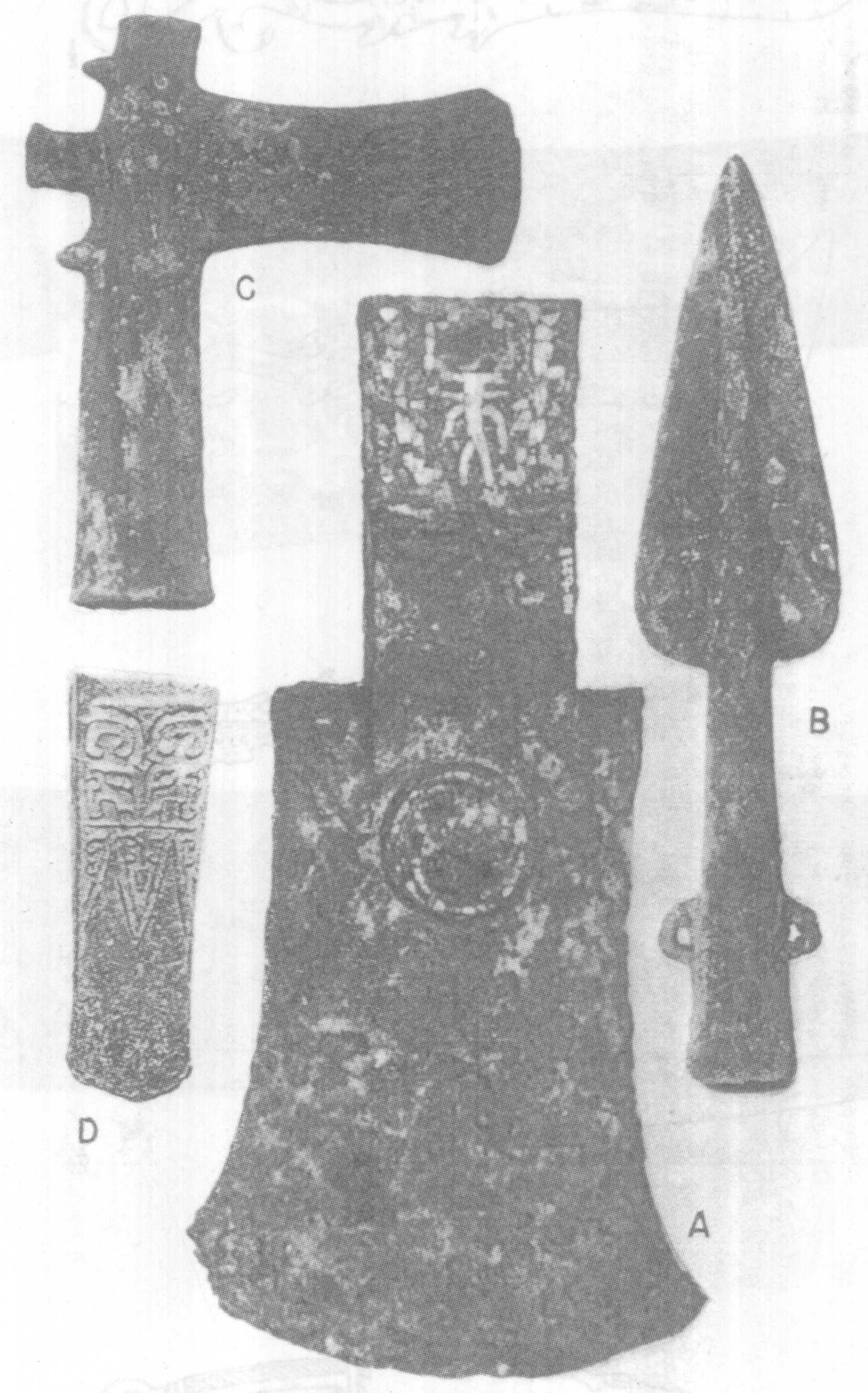


PLATE XXIIA A. Axe-head (Yüeh), with socket for hafting (NB.6228; p. 32). B. Socketed spearhead (NB.3985; p. 31). C. Axe-head (Yüeh), with long socket for hafting (NB.3982; p. 32). D. Socketed adze (Pen) (NB.3984; p. 33)

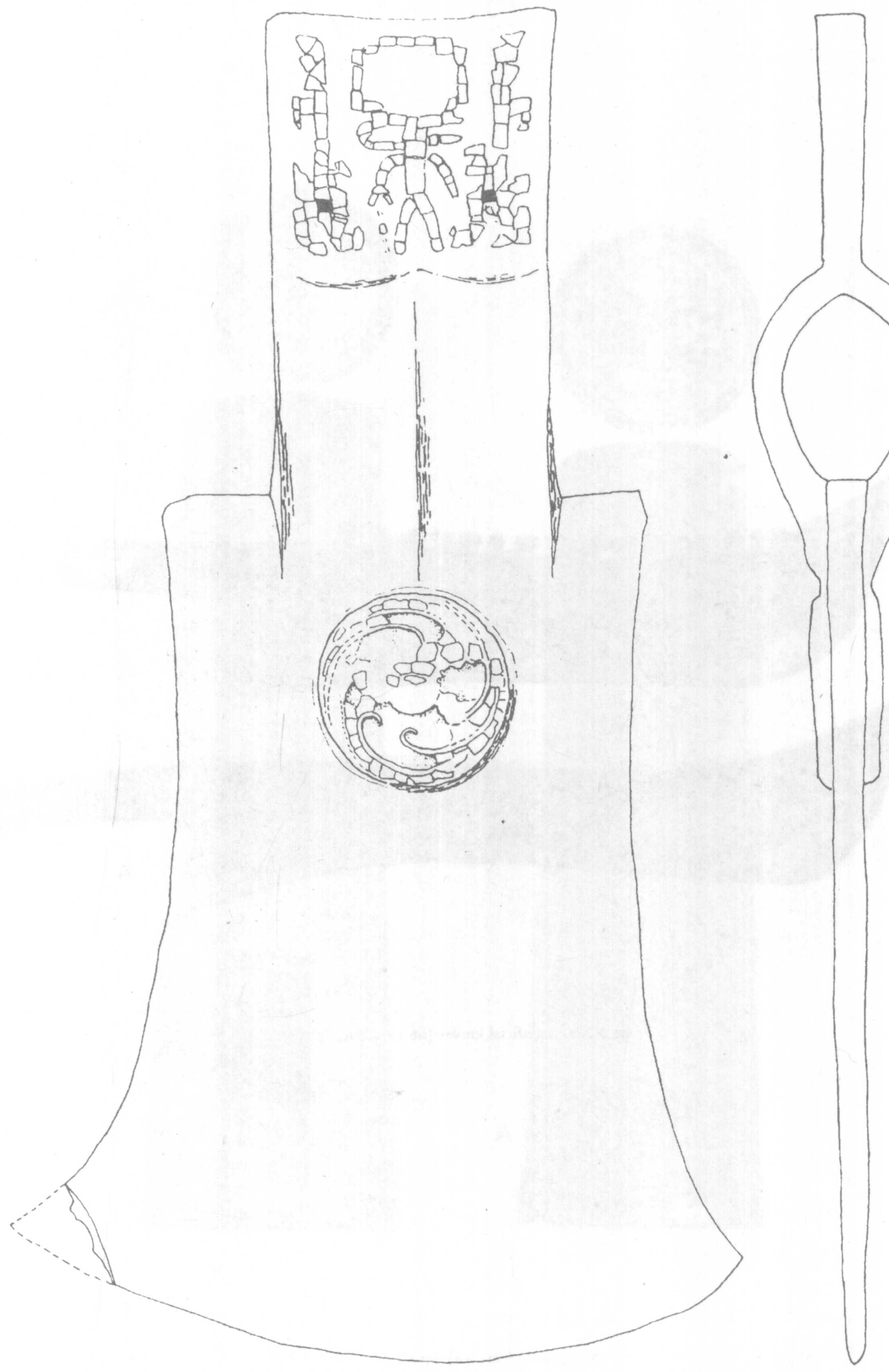


PLATE XXIIB. Line-drawing of axe-head (Yüeh) NB.6228 (Plate XXIIA A)

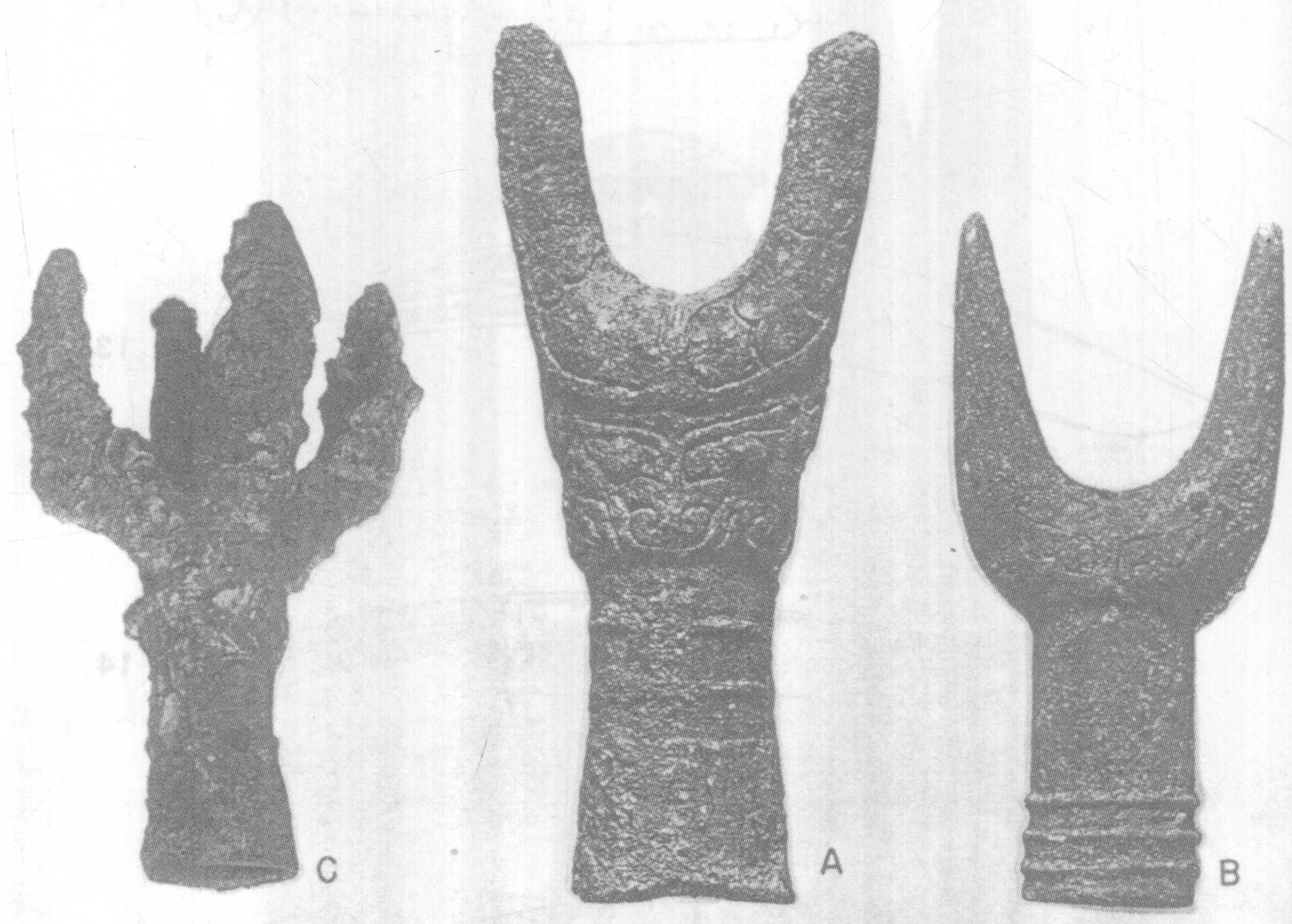


PLATE XXIII—A,B. Two-pronged butts (NB.3986,3987; pp. 31, 32). C. Four-pronged butt (Supplementary; p. 32)

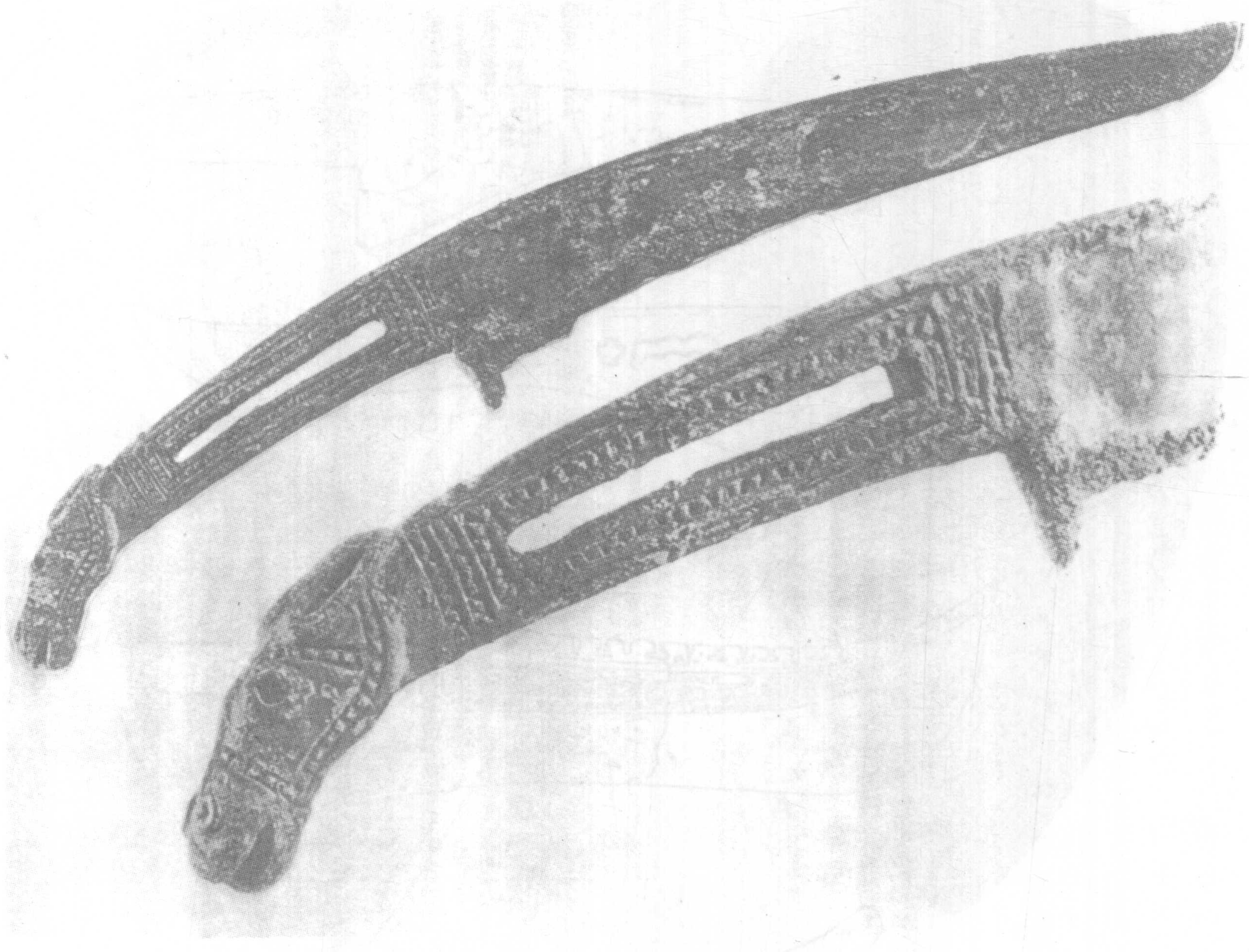


PLATE XXIV. Ceremonial knife, with handle terminating in a horse's head (NB.4047; p. 35)

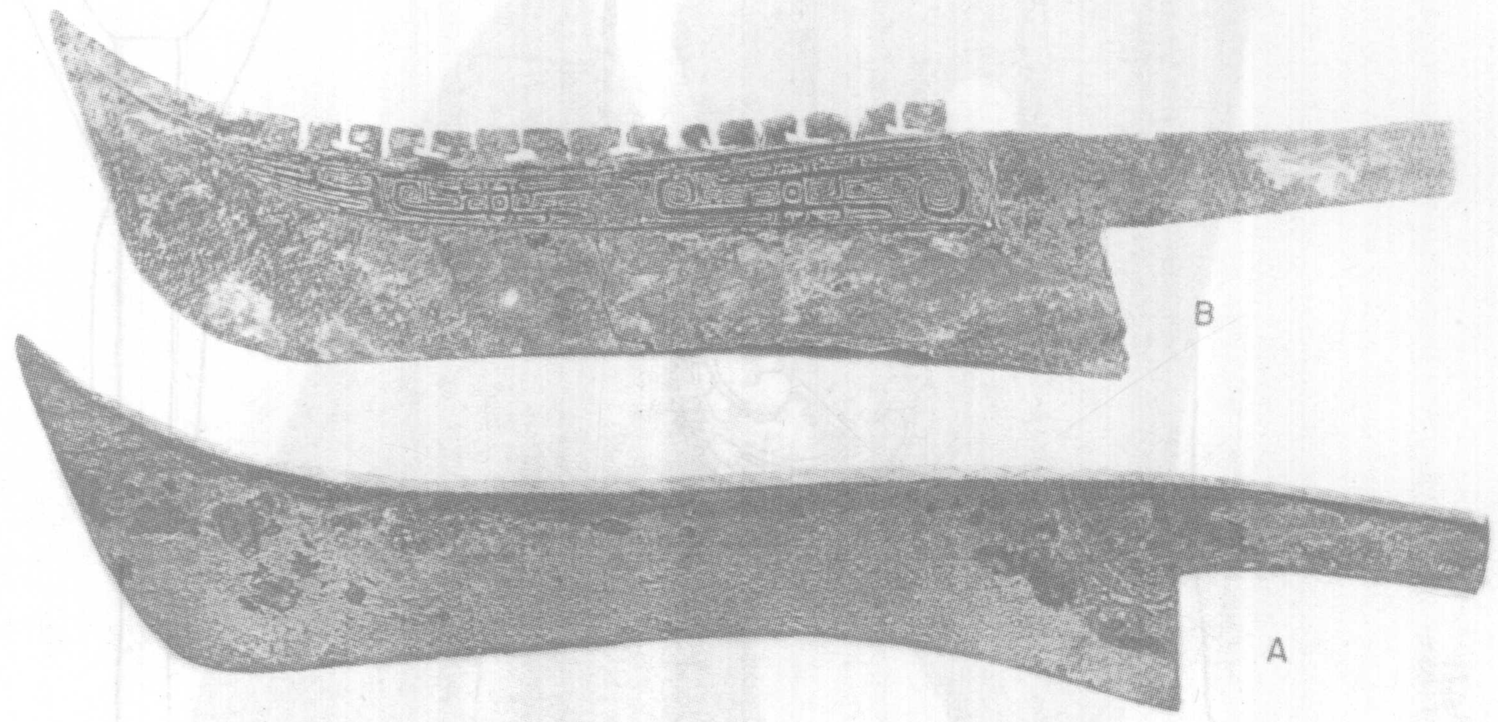


Plate XXV. Sacrificial knives (NB.3972,4049. p. 34)

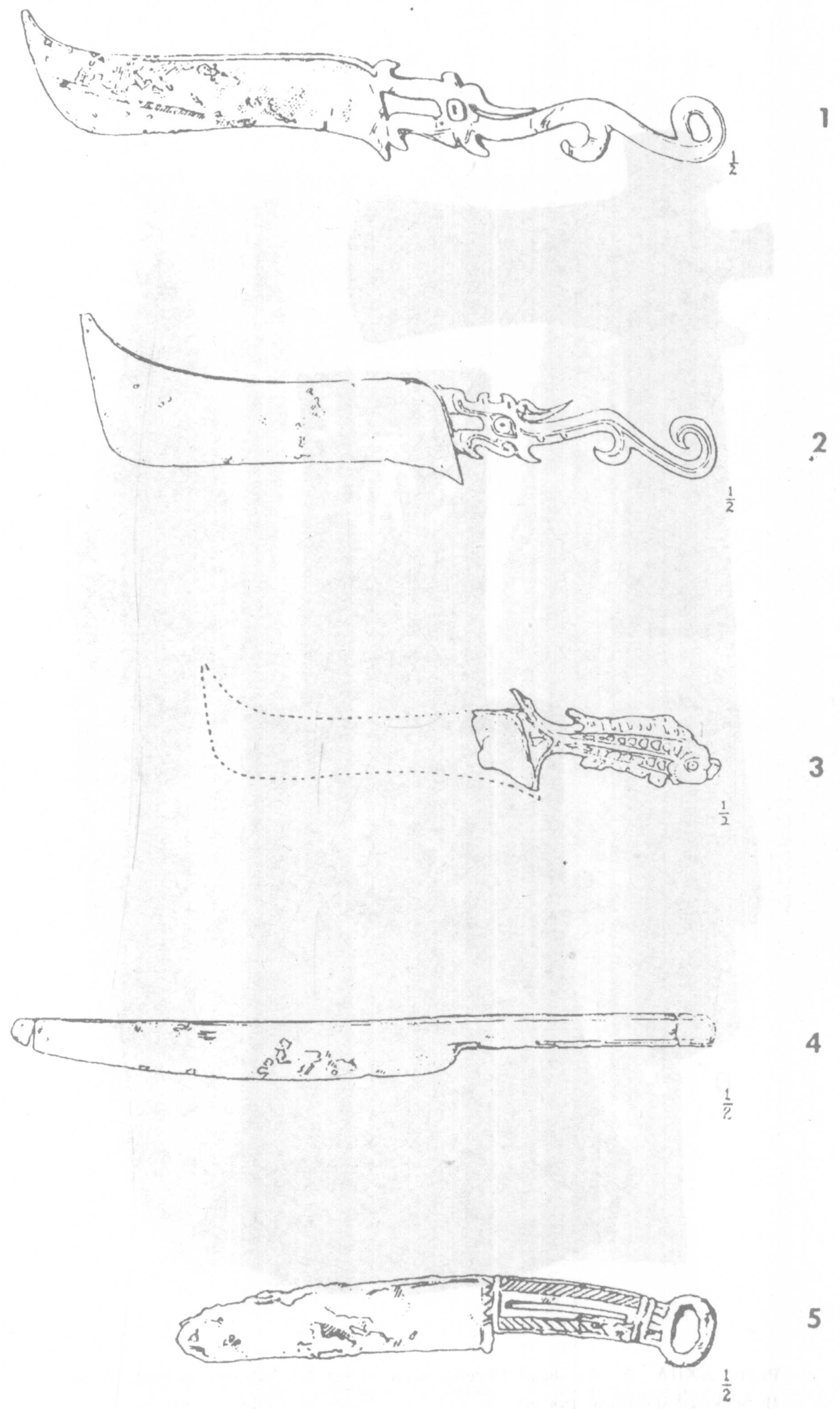


Plate XXVI. Line-drawings of knives (NB.3960,3961,3973,3971,3965: pp. 33, 34)

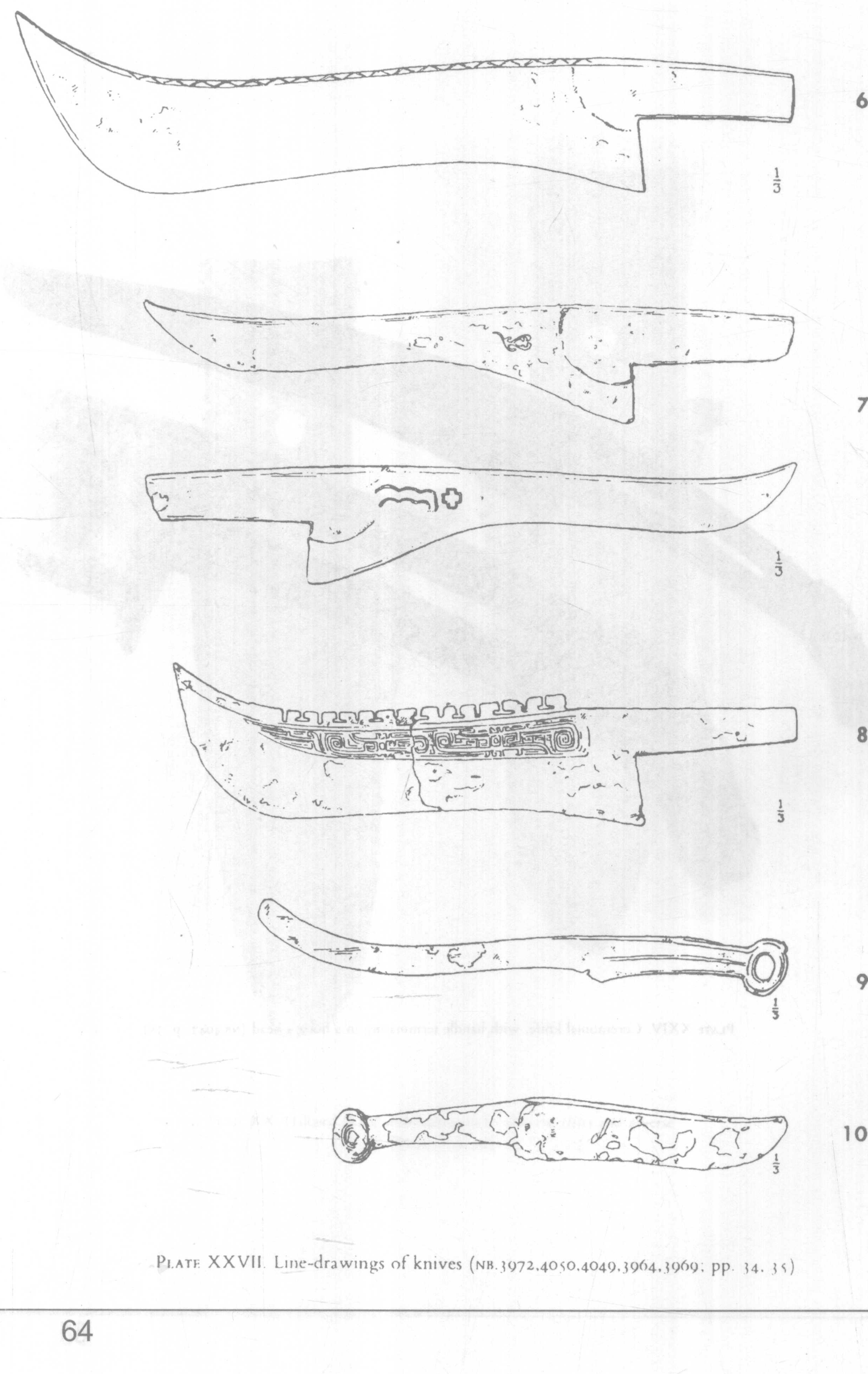


Plate XXVII. Line-drawings of knives (NB.3972,4050,4049,3964,3969: pp. 34, 35)

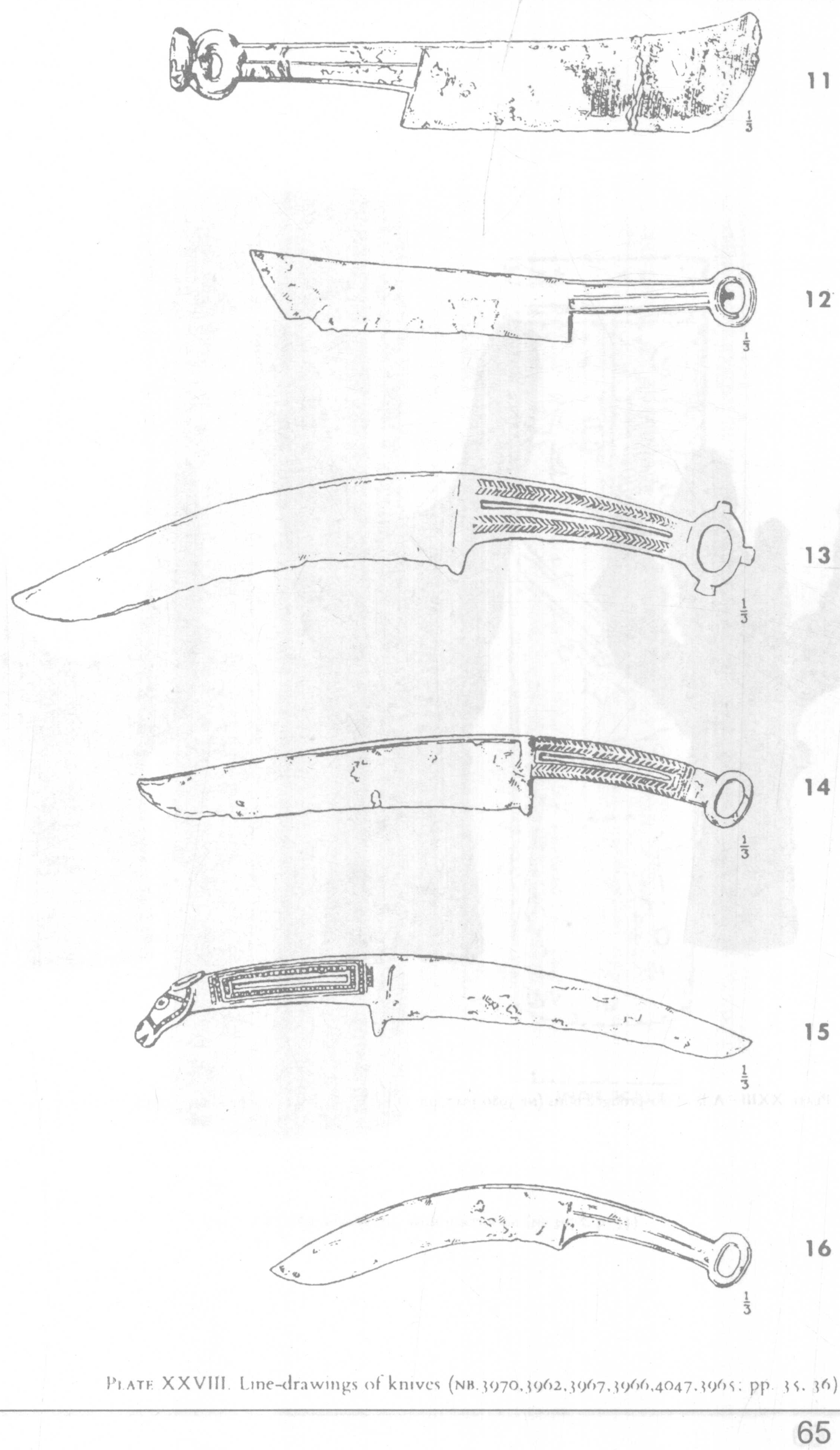


Plate XXVIII. Line-drawings of knives (NB.3970,3962,3967,3966,4047,3965: pp. 35, 36)

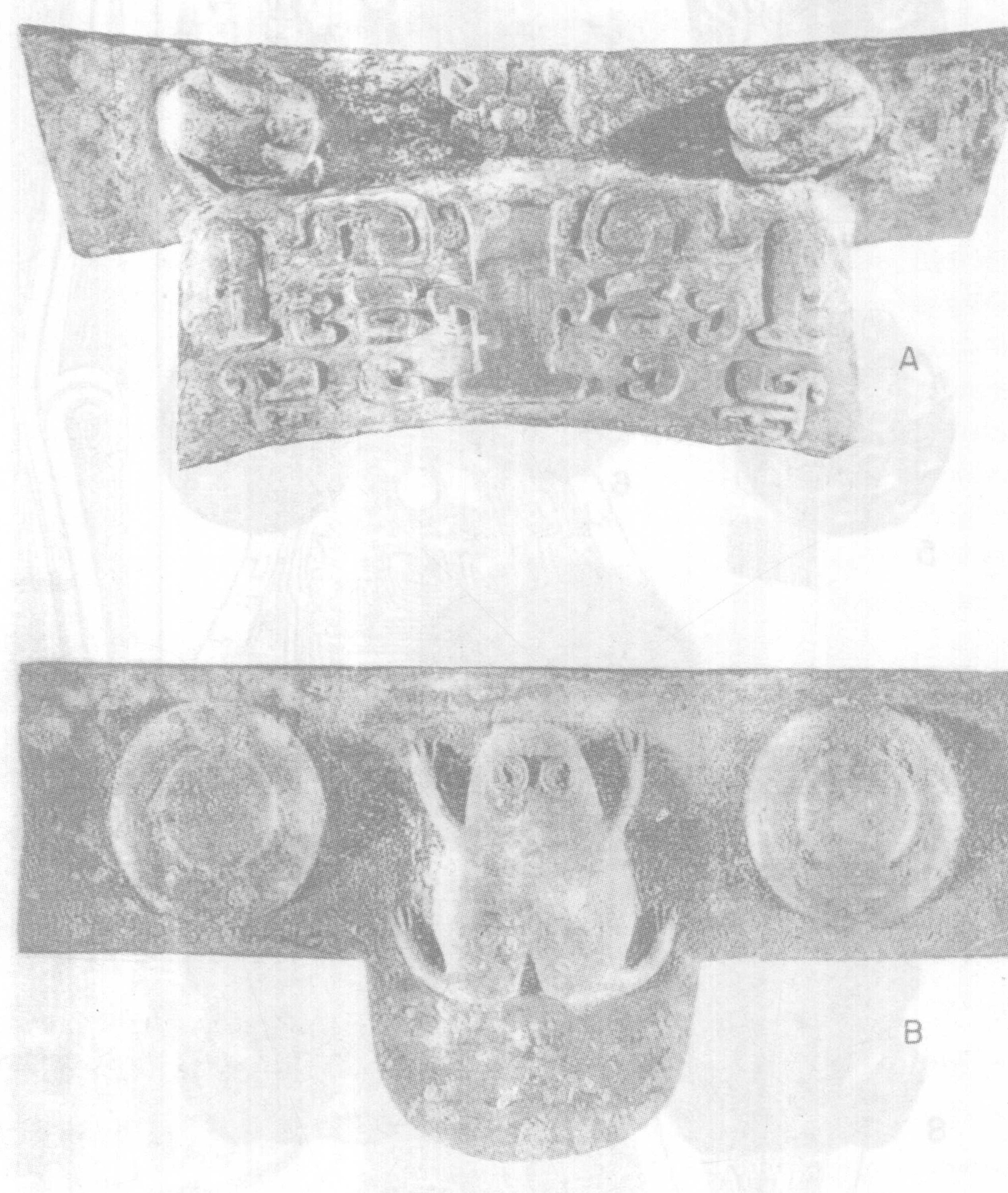


Plate XXIX. Chariot fittings (NB 5333,5334; p. 39)

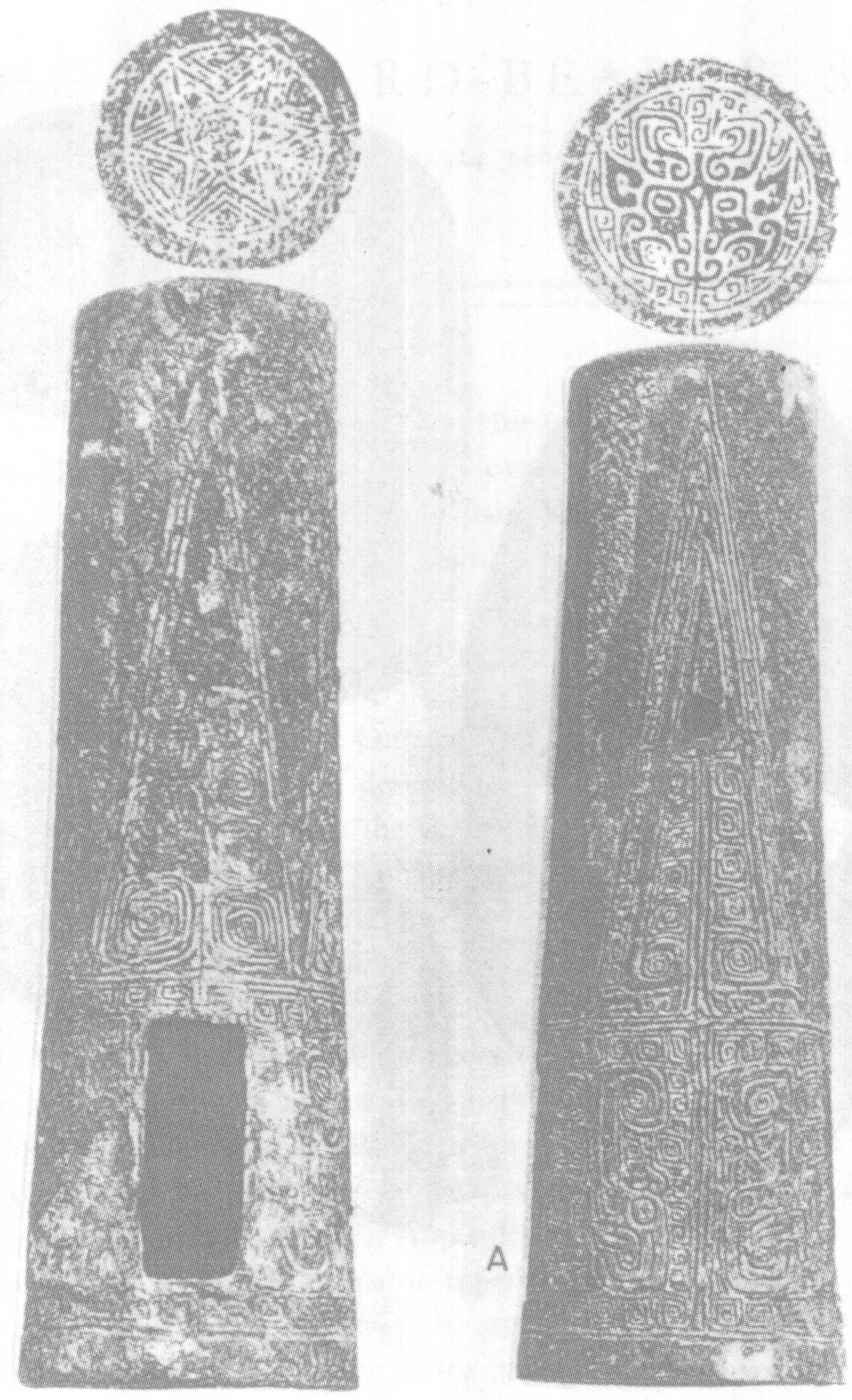


Plate XXX. Axle-caps (NB 5327,5328; p. 38)

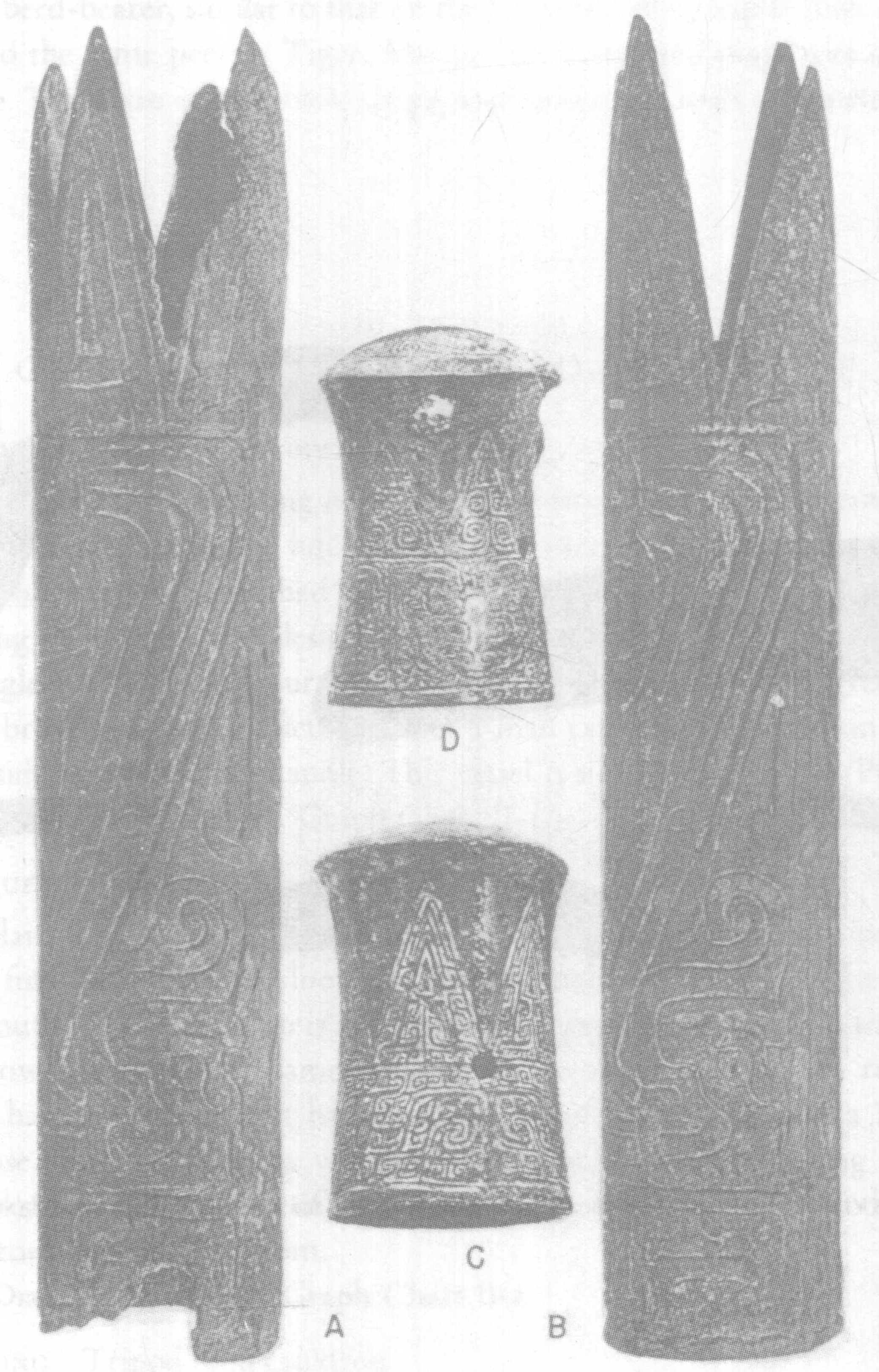


Plate XXXI. A,B. Four-pronged staff ends (NB 5330,5329; p. 39).
C,D. Staff finials (NB 5326,5325; p. 38)

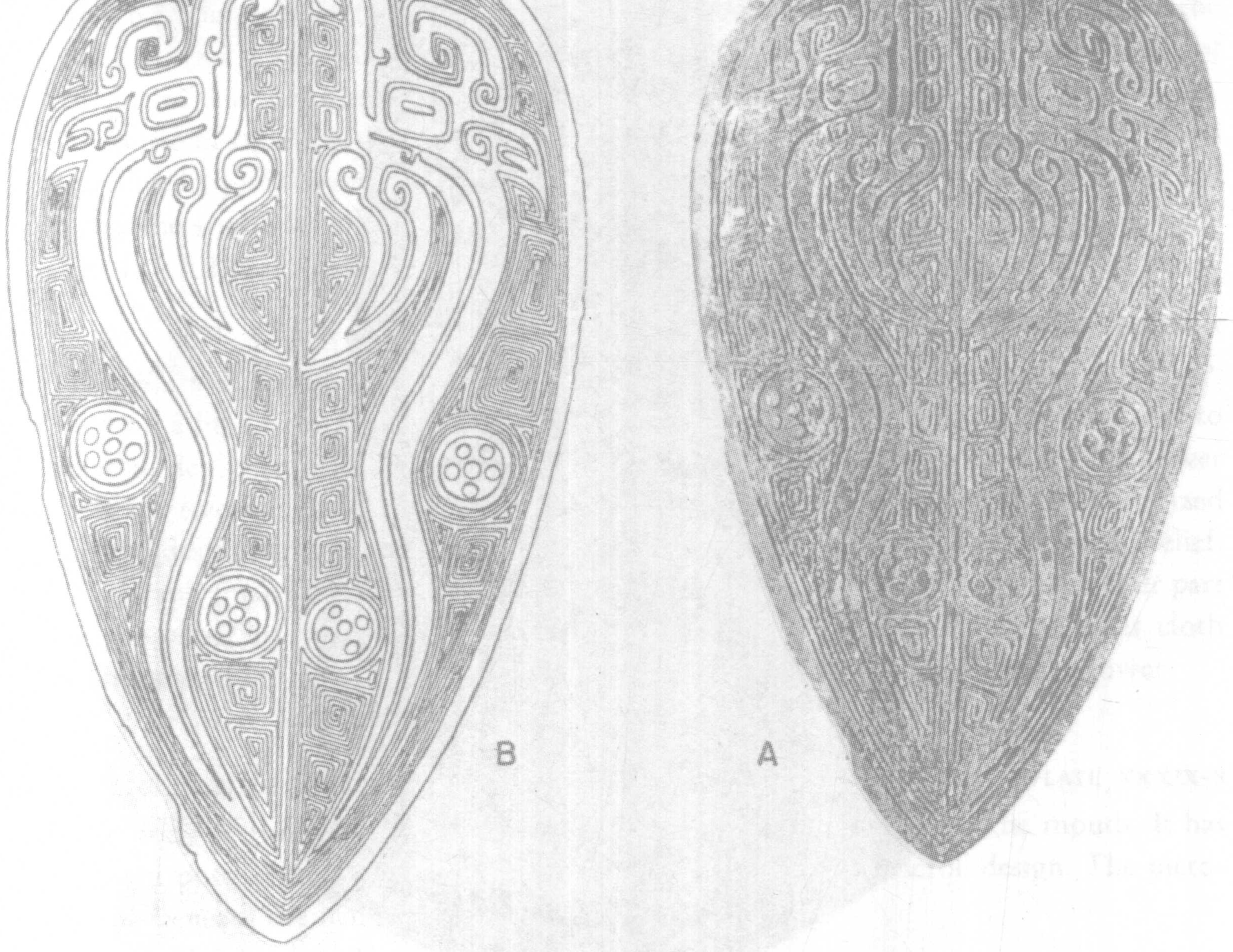


Plate XXXII. Pear-shaped plaque (NB 5342; p. 39)

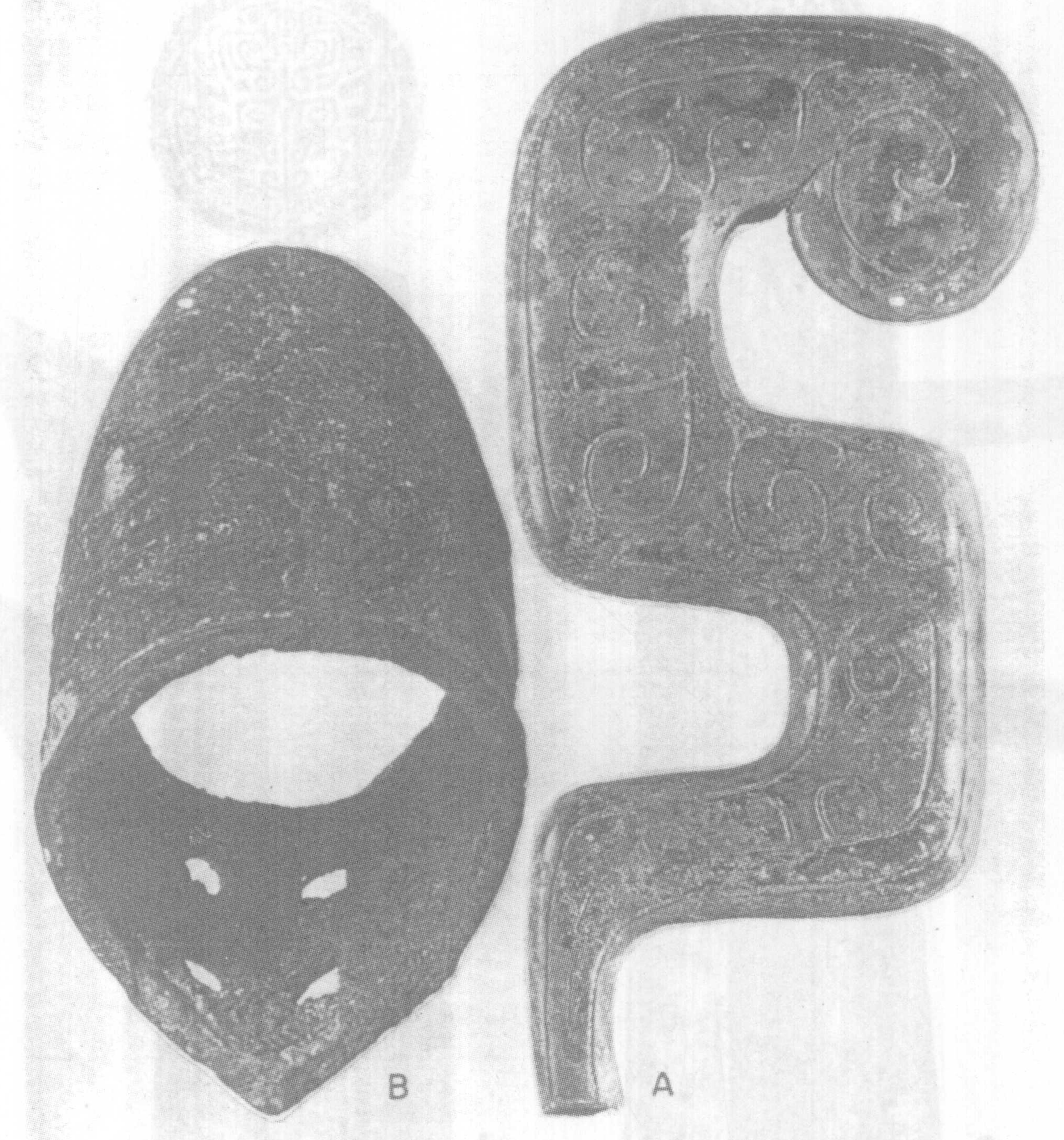


PLATE XXXIII A. Appliqué ornament (NB.5331; p. 39). B. Archer's thumb-ring (NB.5332; p. 39)

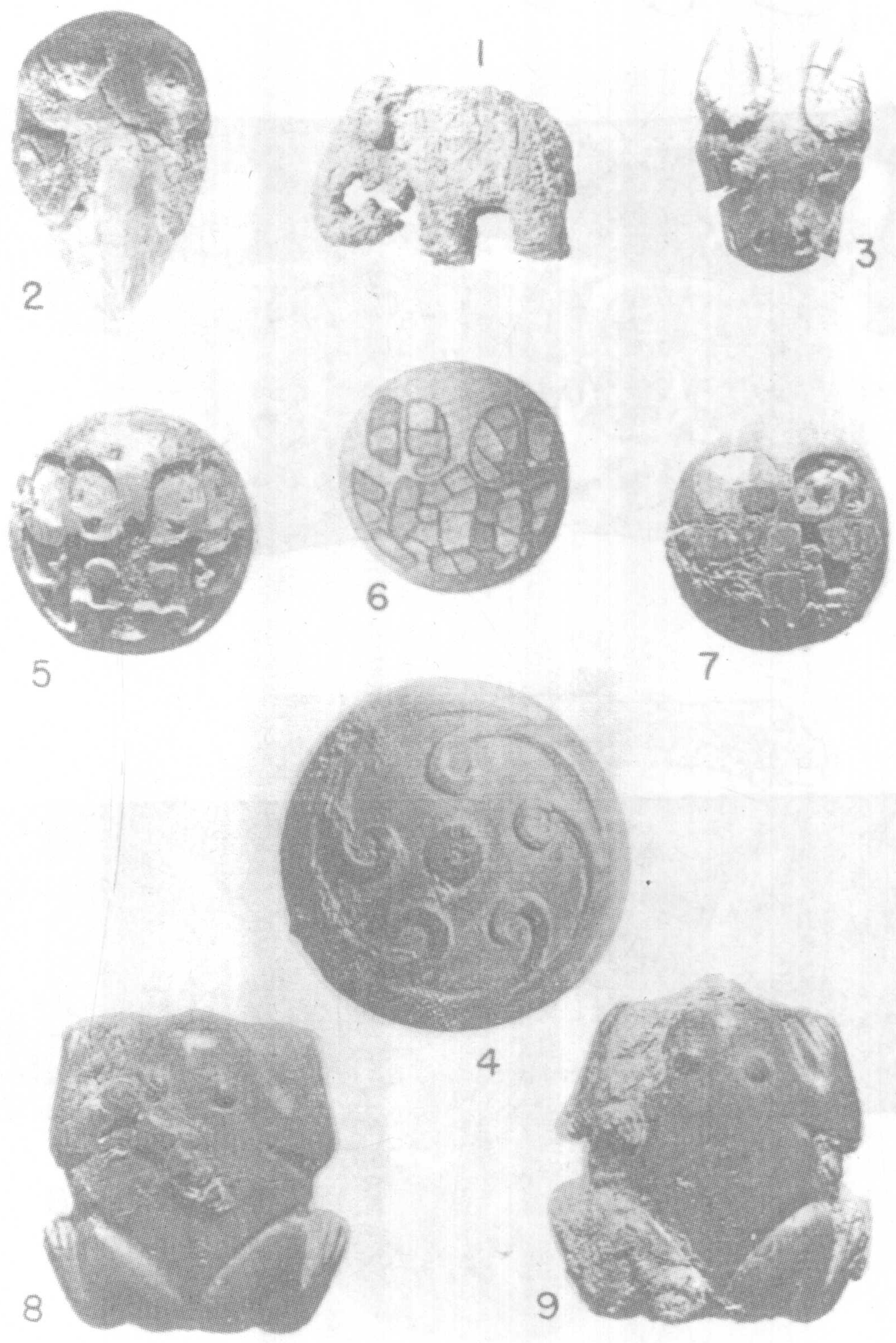


PLATE XXXIV 1. Small hollow elephant (NB.2974; p. 98). 2–9. Slide bosses (NB.3993,3995,3996,3997,4019,3990,3991; pp. 37, 38)



PLATE XXXV. Chariot fitting (NB.4048; p. 38)

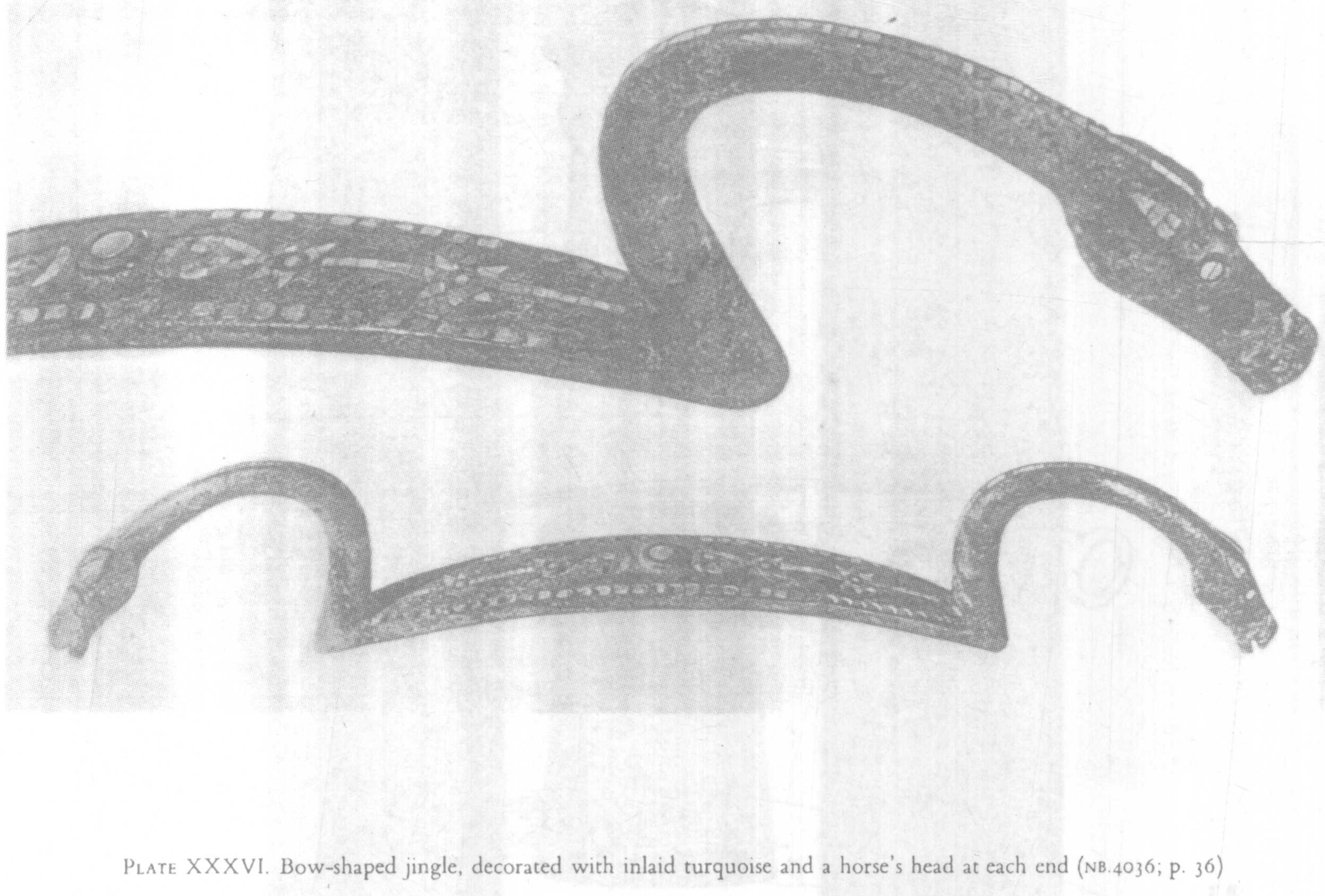


PLATE XXXVI. Bow-shaped jingle, decorated with inlaid turquoise and a horse's head at each end (NB.4036; p. 36)



PLATE XXXVII. Line-drawings to show decorations—1. Chariot fitting (NB.4041; p. 37). 2. The two lower zones of NB.4032 (Plates IV, XV, and p. 26). 3. The base zone of NB.4034 (Plate III and p. 26). 4. Terminal socket (NB.4045; p. 37). 5. Harness plaque (NB.4044; p. 37). 6. Upper end of handle of NB.4023 (Plate XIII D and p. 28)

GROUP II

THE HALBERD-BEARER SET

Shang. Wu-Ting Period. 1324–1265 B.C. Anyang, Honan

AT THE END OF 1931 peace once more returned to Honan when General Feng Yü-hsiang withdrew his army to the west and a new military Governor, General Liu Shih, took over control of military affairs. The Civil Governor, Chang Fang, was still in office, but the two worked well together so that life became more normal, except for famine conditions in the south of the province. Official excavations of the Academia Sinica were not immediately resumed, but free-lance excavators got busy, and a spate of archaeological material came in.

In the spring of 1932 bronze vessels of a plain but substantial type began to come from Anyang. One set, of which the Royal Ontario Museum obtained several dozen items and another collector a like quantity, was designated "The Bearer of the Halberd" or "The Ko-Bearer," because the pictograph on the vessels was of a boy or man carrying a dagger-axe or halberd on his shoulder. If the Elephant Tomb set of Group I centred around Tiger, Marquis of Yung, who was the bearer of the ceremonial halberd in the period of Wu-Ting (1324–1265 B.C.), it is more than likely that this Halberd-Bearer set was in some way associated with the same man, for the dominant pictograph was of the bearer of the halberd.

The objects of Group II were said to have been excavated at Kao-lou Chuang, a village just west of the railway and a short distance northwest of Anyang railway station. Those who know the locality inform us that the owners probably lived there, but the objects themselves were excavated in a brick kiln directly across the railway east of Kao-lou village and north of the railway station. (See Map B, Appendix H.)

A second set of vessels, Group III, similar in type but carrying a different pictograph, came out at the same time but probably not from the same pit, although they are similar in every way to the vessels of Group II. The name of the place associated with this other set is Kuo-chia Wan (Bend of the Kuo Family) which is a village in a bend of the River Huan, near the railway, and directly north of the railway station. This is not to be taken as a definite locality, but it is a fact that Groups II and III are closely associated in the area of the Anyang railway station and that the Elephant Tomb is not far away, being due west of the station towards Hsiao-t'un village, and due south of Ta-ssu-k'ung Ts'un. We thus assume that both Group II and Group III are of the same date as Group I, that is, about 1324–1265 B.C.

It might be mentioned here that in the Eumorfopoulos Collection of Chinese Bronzes there is a large and important bronze beaker of the Tsun type which carries a single pictograph of the halberd-bearer, similar to that on the Lei vessel of Group II (No. 4). It probably was dedicated to the same person, Tiger, Marquis of Yung, and may have come from the same excavation. This Tsun is 10.25 inches high, approximately, with a diameter at the mouth of 7.6 inches.

OBJECTS IN THE HALBERD-BEARER SET

1 NB.3213 CHIA Tripod wine container — PLATE XLVI

This vessel is shaped for standing over a charcoal fire. It has three hollow, bulbous legs, which allow quick heating of liquid contents; a straight neck; and an everted mouth, to the rim of which are attached two rectangular posts with mushroom-shaped caps, one showing an incised scroll design, the other hidden by cloth adhering to the surface. It has a single vertical handle surmounted by an ox head. Encrusted green patina, with patches of brown cuprite. A pictograph of a man carrying a halberd on his shoulder is situated inside the rim at the handle. This vessel is similar to NB.3193 (Pl. XLVII).
Ht. 11.2"; Dia. at mouth 7.3". Graph Chart II-1

2 NB.3214 KUEI Food vessel — PLATE XL-B

This is a plain bowl-shaped vessel, with a foot-rim; obviously it was not intended for use over a fire. The body is bulbous at the base, inclining slightly to the neck; it has an everted mouth. The decoration is a deep band of rectangular scroll on the foot, and another narrower band of the same design with two animal masks in relief below the mouth. It has no handles, but has a pictograph of a man carrying a halberd on the interior base. Encrusted patina with patches of heavy cloth adhering to the surface. Grain marks cover the inside of the vessel, and solid lumps of corroded millet were obtained from the inside bottom.
Ht. 5.5"; Dia. at mouth 7.6". Graph Chart II-2

3 NB.3217 TING Tripod food cauldron — PLATE XL-A

Skeletal remains of fowl and hares have been found in similar cauldrons, but nothing was found in this vessel. The round bowl, with two loop ears perpendicular on the rim, is decorated with a band of meander design, to which cicadas are pendent and is inscribed inside with the graph of a man carrying a halberd. Remains of coarse canvas cover the rim and the ears and woven straw-like matting adheres to the lower part of one leg.
Ht. 8"; Dia. 6.2". Graph Chart II-3

4 NB.3218 LEI (or HU) Large wine beaker — PLATE XXXVIII

This has an ovoid body, a broad round shoulder, a heavy incurved neck, and an everted mouth. There are three vertical loop handles surmounted by ox heads, two placed on the shoulder and the third low on the body. On the shoulder are also six bosses with incised comma-shaped scrolls; and inside the mouth of the vessel is the pictograph of a man bearing a halberd. The patina is vivid green touched with purple and brown cuprite, while inside the vessel are lumps of brilliant malachite. This type of vessel invariably has a lid, which this specimen did not have; but it had instead a wine beaker of the Ku type (NB.3215) which took the place of a lid. This had been placed in the mouth of the Lei so that the trumpet-shaped mouth of the Ku tightly sealed the mouth of the Lei. In course of time the vessel had tipped over somewhat, and the water line on the Ku is paralleled by the water line in the larger vessel, and the Ku and the inside of the Lei carry the same sort of malachite globules.
Ht. 13.5"; Dia. at mouth 6.2". Graph Chart II-4

5 NB.3215 KU Slender wine beaker — PLATE XXXIX-A

This Ku was found inside the Lei NB.3218 which had been tilted at an angle of 45°, leaving a liquid zone mark. Crystallization of the malachite at the bottom is similar to that inside the Lei vessel. The upper trumpet-shaped half of the vessel is plain. The lower half has two zones: that above the central ridge is barrel-shaped, with highly stylized animal design; that below has a similar stylization of monsters with eyes in strong relief. The graph (man carrying a halberd) is in relief, inside the foot-rim. Inside the upper part of the vessel are traces of a coarse woven material, and slight traces of a finer cloth round the upper rim. There are flanges on the centre zone, but none on the lower.
Ht. 10.4"; Dia. at mouth 5.75". Graph Chart II-6

6 NB.3216 CHÜEH Tripod libation cup — PLATE XXXIX-B

The body of this vessel is undecorated except for three rings below the mouth. It has upright posts with conical caps, incised with a comma-shaped scroll design. The pictograph beneath the handle is of a man carrying a halberd.
Ht. 8". Graph Chart II-5

7 NB.3224 CHÜEH Tripod libation cup

This is elaborately decorated with animal and cicada designs in high relief. Two uprights have button caps with incised scroll designs. The inscription under the handle carries two pictographs, of which the interpretation at present is unknown.
Ht. 8.25". Graph Chart II-9

8 NB.3212 CHÜEH Tripod libation cup — PLATE XLI-B

The single handle is surmounted by an animal head, inscribed underneath with a halberd graph and the cyclical character YI. The two upright posts of this libation cup

have button caps with a scroll design, and the body of the cup is covered with animal designs on a ground of various rectangular scroll patterns.
Ht. 7.6". Graph Chart II-7

9 NB.3330 Socketed adze
L. 3"; W. edge 1.5"

10 NB.3198, 3199 Two plaques (one illustrated) PLATE XLI-C
These are in the likeness of animal nostrils. L. 6"

11 NB.3331, 3332 LING Small bells
NB.3331 has no flanges on the ends, and no clapper. Ht. 3"; Dia. at lower edge 2" × 1.6"
NB.3332 has flanges on the ends, but no clapper. Ht. 2.4"; Dia. at lower edge 1.75" × 1.25"

12 NB.3219 YÜEH Battle axe PLATE XLIV
One of a pair with NB.3220. The hafting is plain, without a socket. The heel is decorated with an animal mask of tiger form, and the blade with three stylized cicadas on each surface.
L. 8.75"; W. blade 5.5"

13 NB.3220 YÜEH Battle axe
One of a pair with NB.3219. L. 8.75"; W. blade 5.5"

14 NB.3257 YÜEH Large battle axe
There was a pair of these but only one was obtained. Similar to NB.3219, but larger.
L. 9.75"; W. blade 7.5"

15 NB.3329 Arc-shaped jingle
This jingle is double-looped, with an arched connecting bar, and a single stud at the centre and on the arch of each loop. The spherical slotted ends have a rolling pellet of bronze in each—similar to Canadian sleigh-bells. There are marks of thongs at each angle for attachment. Underneath is an inscription of the two characters for "son" and "woman," which together form the word for "good," that is, Hao. (Cf. Pl. XXXVI.)
L. 13.3"

16 NB.3222 YU Wine pail PLATE XLV
This vessel is bucket-shaped, and has a cover and swing handle. It was used for containing wine or other liquid. It has no decoration except two encircling lines at the foot, and two decorative bands, one at the neck of the vessel, and the other around the cover. These bands had a background of lozenge diaper, within two lines of small circles; and the lower band was bisected with two animal heads in relief. The swing handle is moulded into rope-coil, and the cover has a high knob with vertical melon grooves. Both vessel and cover are elliptical in section. The graph inside the cover and at the bottom of the

vessel inside is the pictograph for "falling drops of rain," which is the character Ling. This vessel came with the other material of Group II, but it cannot be accepted with certainty as belonging to Group II, for vessels with the same inscription are said to have been found at Ssu-p'an-mo, a village near Hsiao-t'un. Yet an identical smaller Yu (NB.3197), with a "disk-bearer" graph, very definitely belongs to Group III (cf. Pl. XLVIII).
Ht. handle upright 12.6". Graph Chart IA-10

NOTE

Since Groups II and III came from adjacent tomb sites (see p. 75) and the objects from each are similar in style and very definitely of the same period, it would be almost impossible to avoid a mix-up of objects from the two groups where there were no distinguishing graphs. The greatest care has been taken to avoid such a contingency, and field notes and lists and dates of accession, which are fortunately still in hand, have been a valuable help in the listing of the material of this study. Nevertheless, to avoid being committed to a definite locale when the evidence is confused, it is thought better to place the following spearheads and halberds, from No. 17 to No. 40 in a neutral group and to consider them as belonging to either Group II or Group III. However, two spearheads (NB.2773, 4059), illustrated on Plate XLIIA, are not entered in the list below, since there is a question as to their Hsiao-t'un provenance.

17 NB.2957 YANG-T'OU Spearhead PLATE XLIIB-1
This is socketed and flanged, with two slots for lashing at the bottom of the flanges. It has animal-mask and cicada decoration.
L. 9.5"; W. 2.75"

18 NB.2958 YANG-T'OU Spearhead
Identical with NB.2957. L. 9.5"; W. 2.75"

19 NB.2959 YANG-T'OU Spearhead
Identical with NB.2957. L. 9.5"; W. 2.75"

20 NB.3254 YANG-T'OU Spearhead
Identical with NB.2957. L. 10"; W. 2.75"

21 NB.3255 YANG-T'OU Spearhead
Identical with NB.2957, except that the flange does not extend to the bottom of the socket.
L. 9.75"; W. 2.6"

22 NB.3256 MAO Spearhead
In the shape of a laurel leaf with two loops on side of socket for lashings.
L. 8.25"; W. 2.25"

23 NB.2965 MAO Spearhead PLATE XLIIA-1
In the shape of a laurel leaf, socketed, with two loops on side for lashings.
L. 8"; W. 2.2"

24 NB.4053 YANG-T'OU Spearhead PLATE XLIIB-2
Identical with NB.2957, except for the addition of an inscription of two words Ta-Yü, of which the Yü is taken to be a homophone for "rain" (Yü), in which case the meaning would be "great rain," and be related possibly to an official whose duties would be to pray for rain, which would be a matter of great concern to a people dependent on agricultural pursuits.
L. 10"; W. blade 2.8"

25 NB.4054 YANG-T'OU Spearhead
Identical with NB.4053. L. 10"; W. blade, 2.8". Graph Chart IB-7

26 NB.4055 YANG-T'OU Spearhead PLATE XLIIB-3
Identical with NB.4053, except that it does not carry the Ta-Yü inscription, but has in the upper part of the blade an incised pictograph of a spear or arrow point.
L. 10"; W. blade 2.8"

27 NB.2960 KO-43 Halberd
This is a funeral type, with a very thin blade. It has an elaborate stylized elephant-head design on the butt, which some students recognize as a highly stylized bird form. (In the Ko type-sequence lists compiled by Dr. J. M. Menzies in the custody of the Royal Ontario Museum, this is Ko-43.)
L. 11". Appendix E, Fig. 9

28 NB.2961 KO-38 Halberd
For funeral use, with stylized animal design on the butt. L. 10.9"

29 NB.2962 KO-40 Halberd
For funeral use, with badly corroded animal design on the butt. L. 10.75"

30 NB.2963 KO-92 Halberd
For funeral use, with animal design on the butt. L. 9.4"

31 NB.2964 KO-113 Halberd
This is a strong, serviceable weapon. It has no decoration except a simple incised line on the butt.
L. 9.75"

32 NB.2966 KO-34 Halberd PLATE XLIII-A
For funeral use, with much corroded elephant-head design on the butt. Some accept

this as an eagle-head design, and it may be in some cases, but it is most decidedly an elephant head in others.
L. 14"

33 NB.2967 KO-53 Halberd PLATE XLIII-B
This is very beautifully made and might well have been used for ceremonial purposes. The design on the butt is a stylized head of a bird or elephant.
L. 14". Appendix E, Fig. 10

34 NB.2968 KO-42 Halberd
This is also well made and was probably used in the ceremonies. The butt design is an elephant head.
L. 11.8". Appendix E, Fig. 8

35 NB.3252 KO-39 Halberd
For funeral use. The heel design is of an animal or bird form, but corrosion has greatly obliterated the outlines. Fragments of the wood of the shaft appear to be T'ung wood, which is native to North China. Remains of a leather strap, about one inch in width, adhere to the blade, and traces of a fine mesh silk cloth are probably the remains of silk clothing against which the object rested.
L. 11"

36 NB.3221 KO-69 Halberd
For funeral use. "The design on the butt is that of a coiled dragon with pointed ear and round eye, which faces the shaft. Evidently this design has been stamped into the clay mould by a wood block carving, for while the reverse is clear and bold, the obverse shows two distinct impressions which have confused the design. This indicates that wood stamps were sometimes used to reproduce designs on clay moulds. A definite line of cleavage is seen behind the jaws, where the wood block was apparently broken and had not been replaced in perfect alignment." (J. M. M.)
L. 13.2" Appendix E, Fig. 11

37 NB.3253 KO-123 Halberd
This has a pictograph of unknown meaning on each surface of the heel, and a strong usable blade. A note in the records states that this halberd came together with three bronze spearheads, inscribed oracle bones, white pottery sherds, stone axes, and fifteen small carved jade pendants.
L. 9.8"

38 NB.4051 KO-122 Halberd
This is a strongly made weapon, with a deeply incised pictograph sunk in the butt.
L. 9.5"

39 NB.4057 KO-121 Halberd

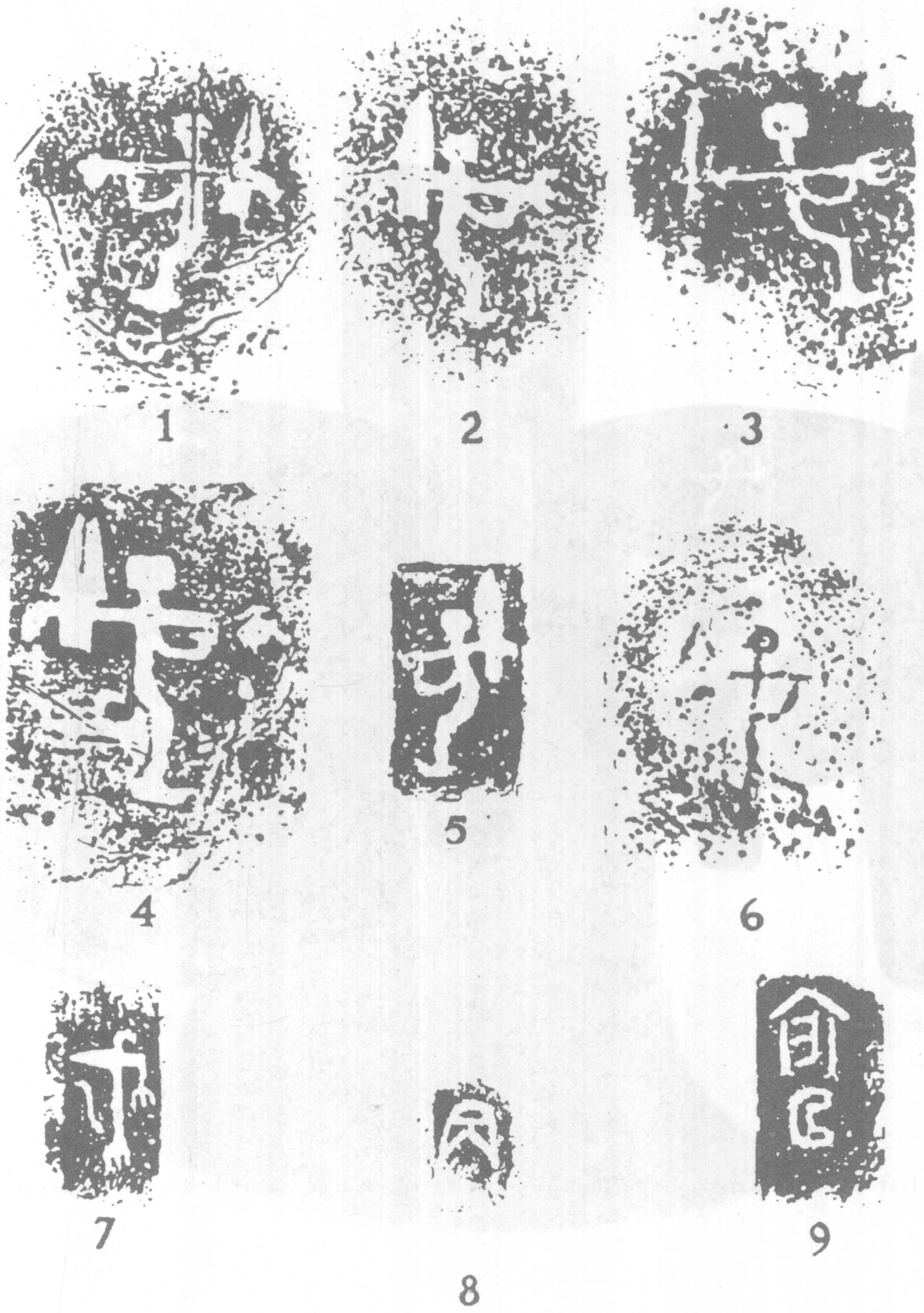
Identical with NB.4051 above. L. 9.4″

40 NB.4056 KO-84 Halberd

This is well made, and linked to spearhead NB.4055 by a common pictograph. (Cf. Pl. XLIIB-3.)
L. 9.6″

41 NB.3210 KU Slender wine beaker PLATE XLI-A

This vessel has all the characteristics of the Ku, but it is much taller than usual and more slender. It is the most graceful of its type in the Museum collection. It has no inscription, and the thick, bubbly corrosion has almost obliterated its original decorative designs, which would appear to have been exceptionally beautiful.
Ht. 13.3″



GRAPH CHART II 1. Chia: NB.3213; p. 76. 2. Kuei: NB.3214; p. 76. 3. Ting: NB.3217; p. 76. 4. Lei: NB.3218; p. 77. 5. Chüeh: NB.3216; p. 77. 6. Ku: NB.3215; p. 77. 7. Chüeh: NB.3212; p. 77. 8. Chüeh: NB.3225; p. 98 (possibly Group III). 9. Chüeh: NB. 3224; p. 77

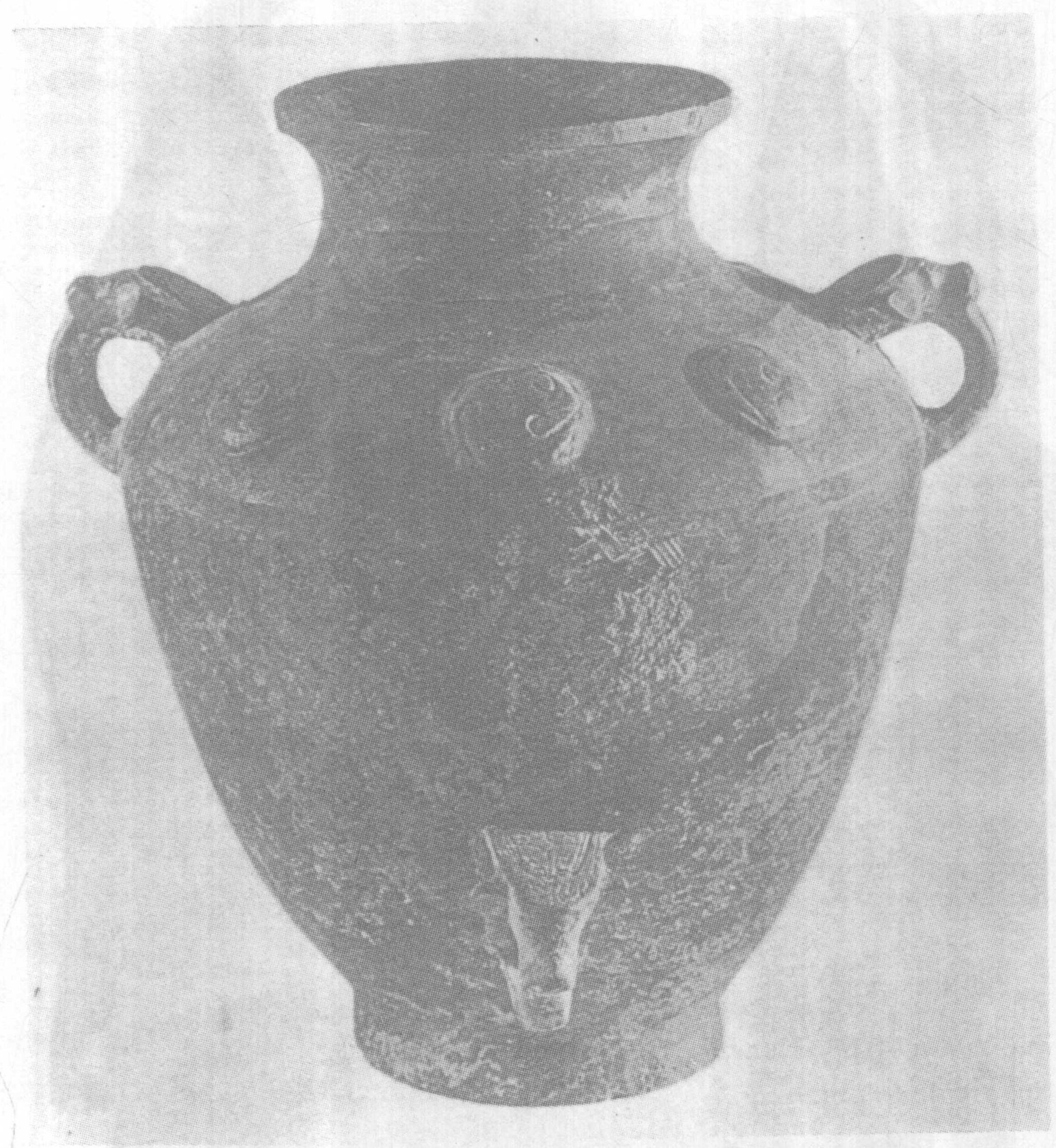


PLATE XXXVIII. Wine beaker of the Lei type (NB.3218; p. 77)

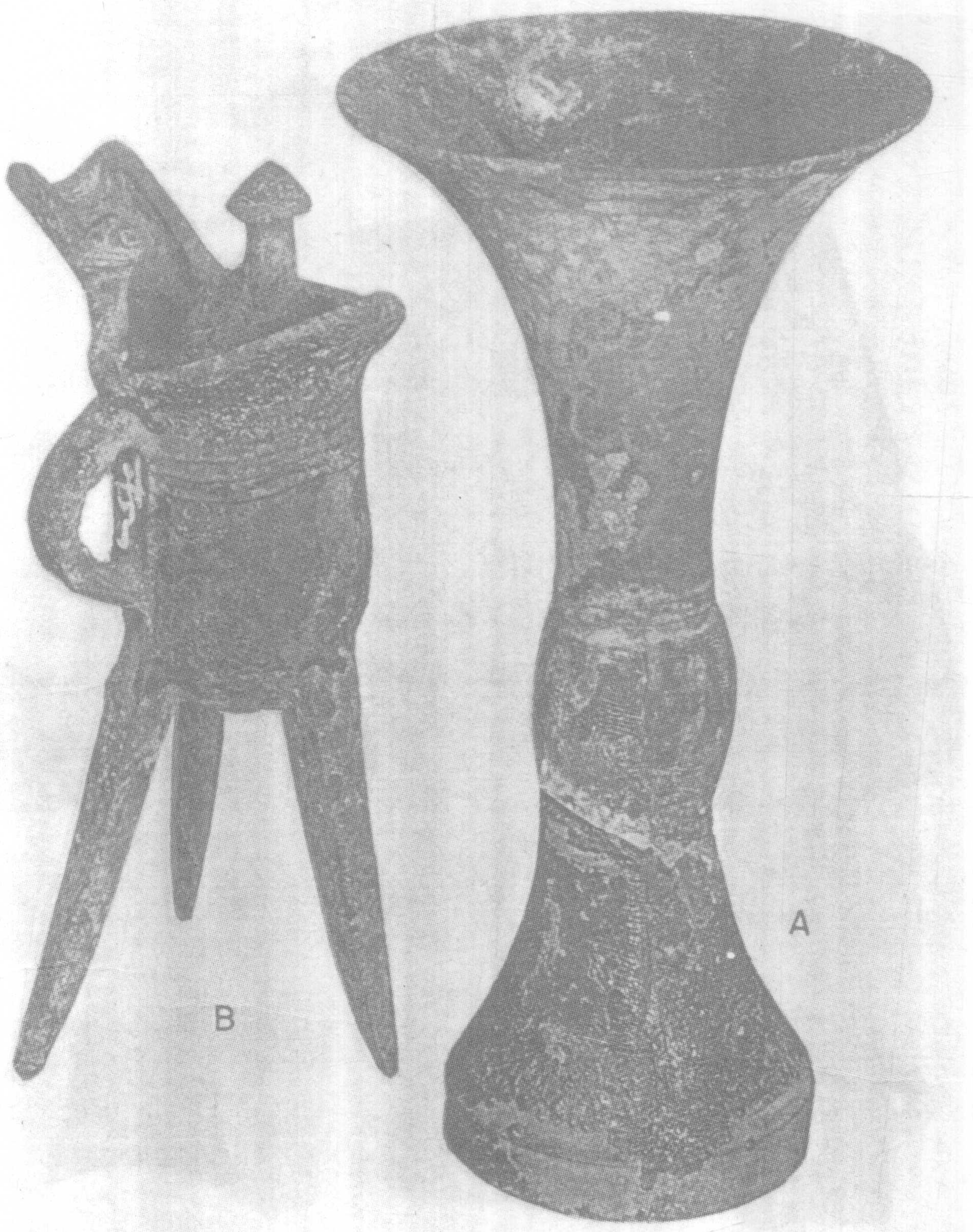


PLATE XXXIX A. Wine beaker of the Ku type (NB.3215; p. 77). B. Libation cup of the Chüeh type (NB.3216; p. 77)

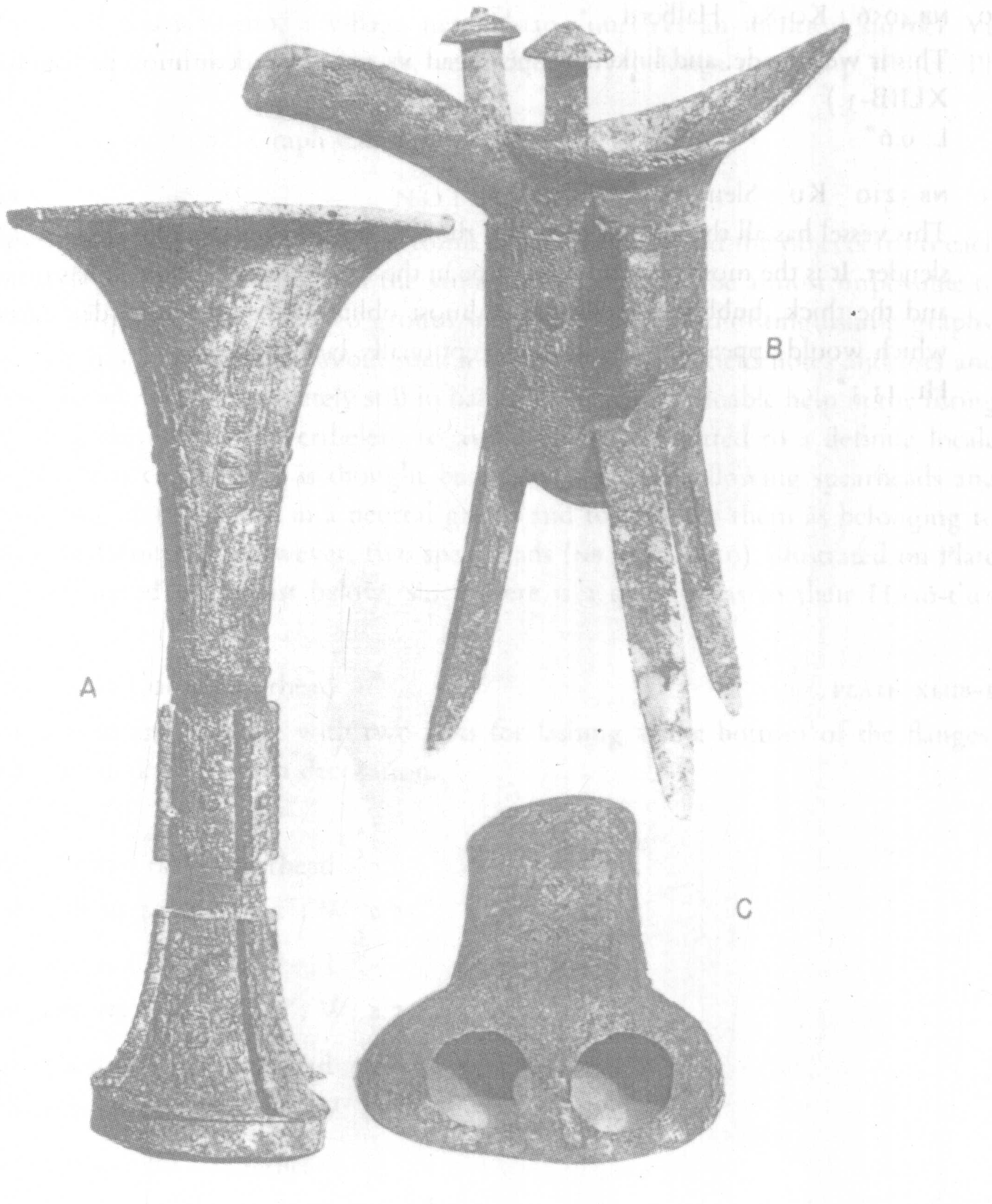


PLATE XLI. A. Wine beaker of the Ku type (NB.3210; p. 82). B. Libation cup of the Chüeh type (NB.3212; p. 77). C. Plaque (NB.3199; p. 78)

87



PLATE XL—A. Food cauldron of the Ting type (NB.3217; p. 76). B. Food vessel of the Kuei type (NB.3214; p. 76)

86

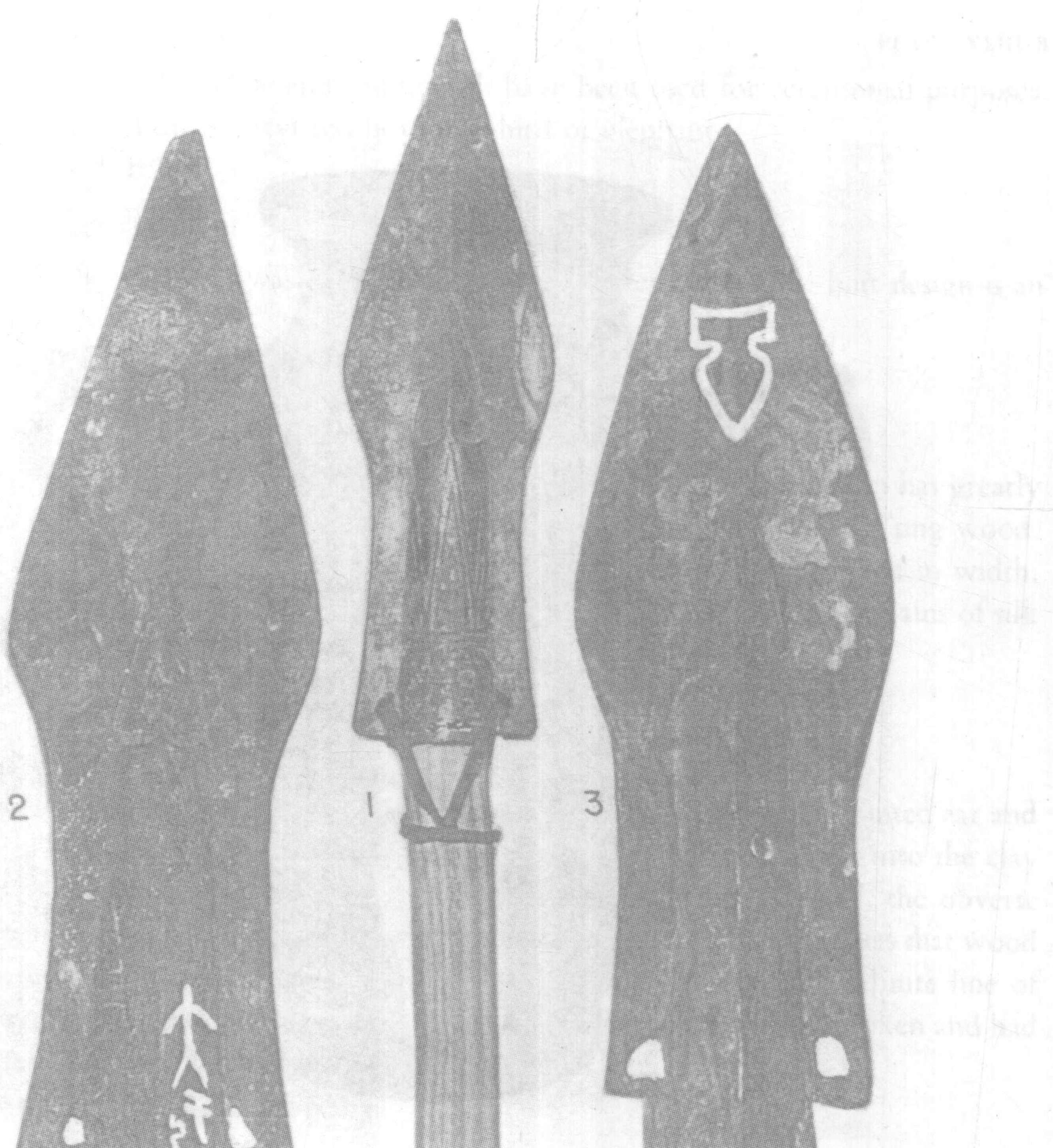


PLATE XLIIB. Spearheads of the Yang-t'ou type (NB.2957,4053,4055; pp. 79, 80)

89

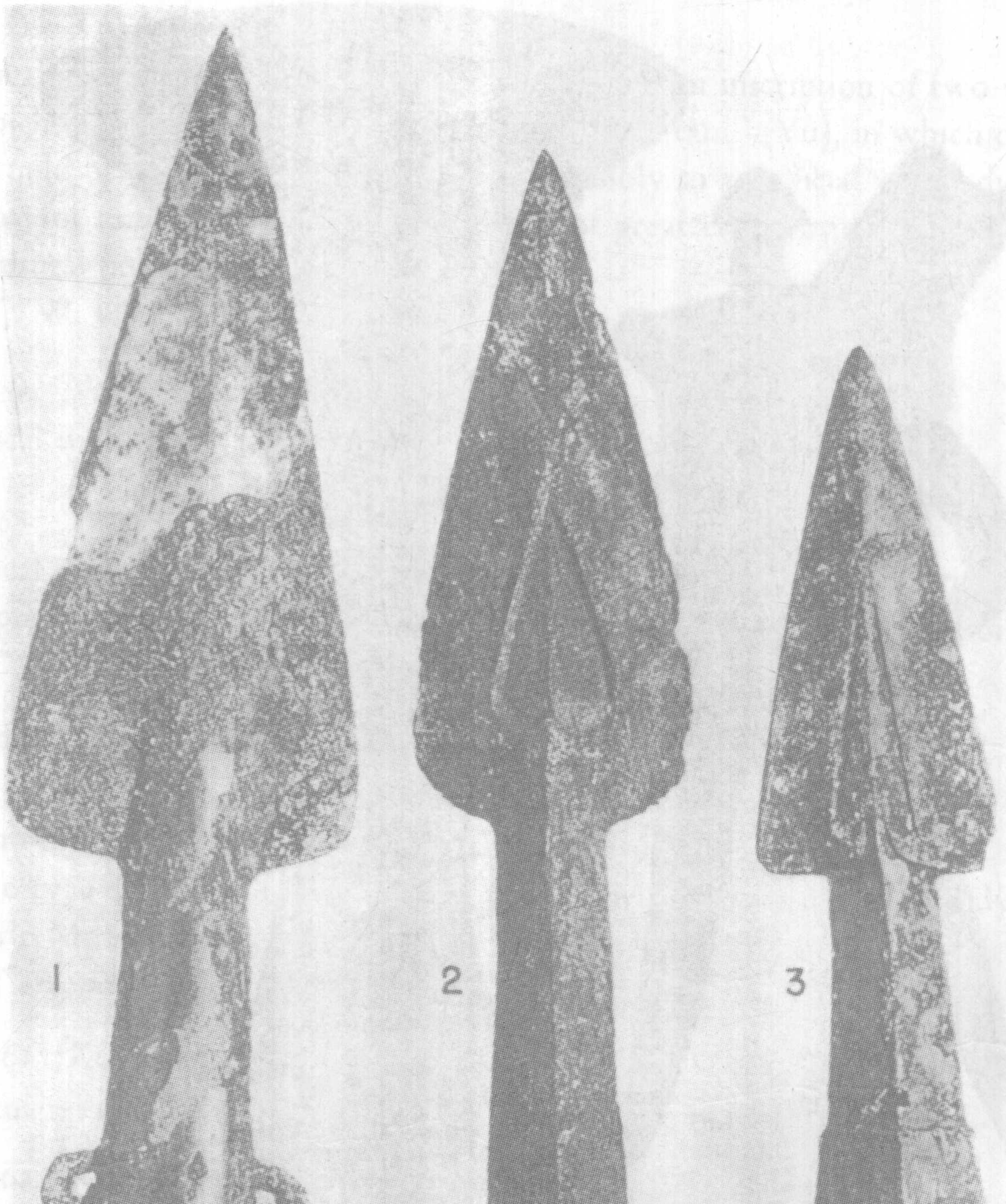


PLATE XLIIA. Spearheads of the Mao type (NB.2965, p. 80; NB.2773.4059, not listed)

88

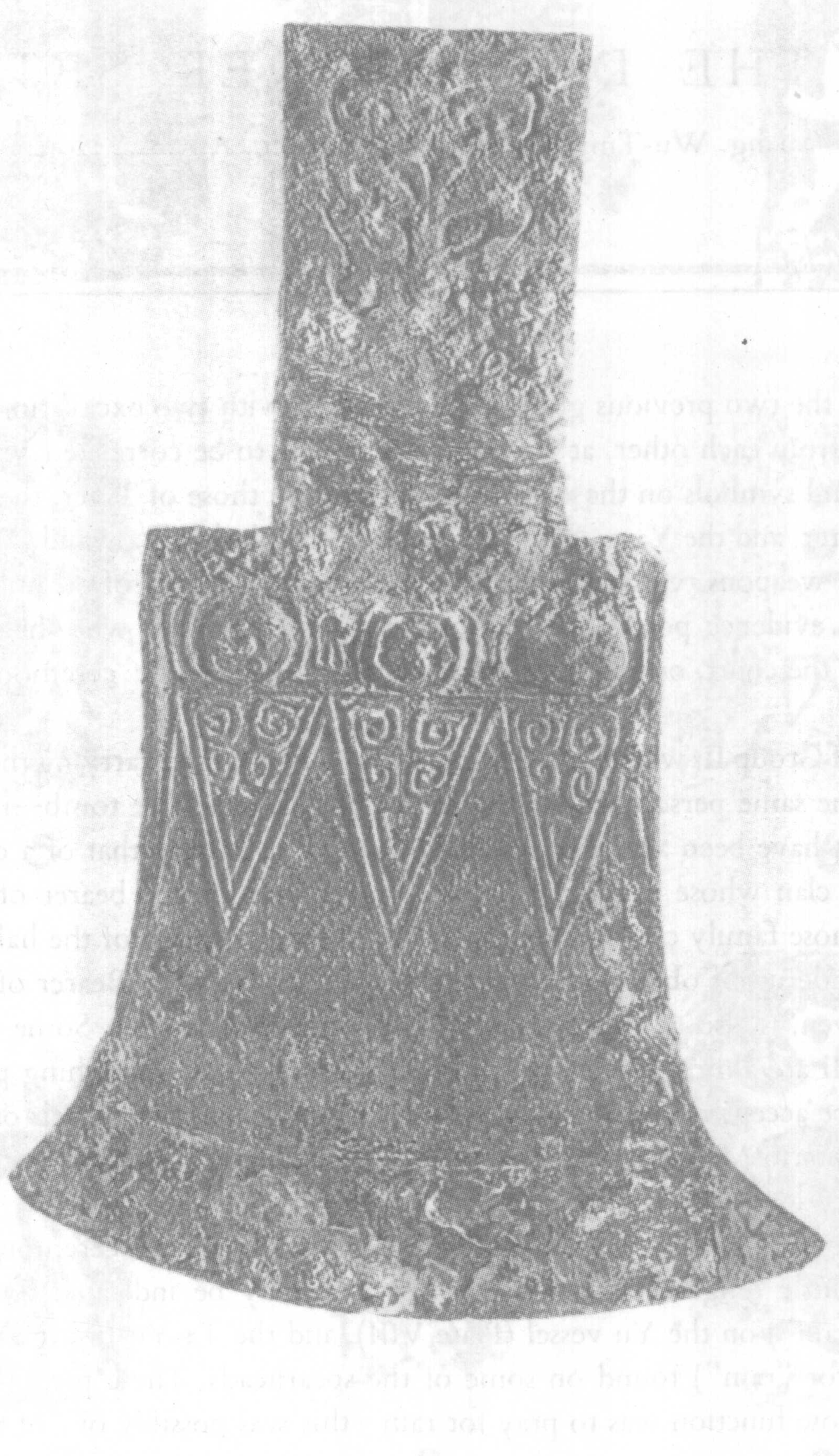


Plate XLIV. Battle-axe (Yüeh) without socket (NR 3219; p. 78)

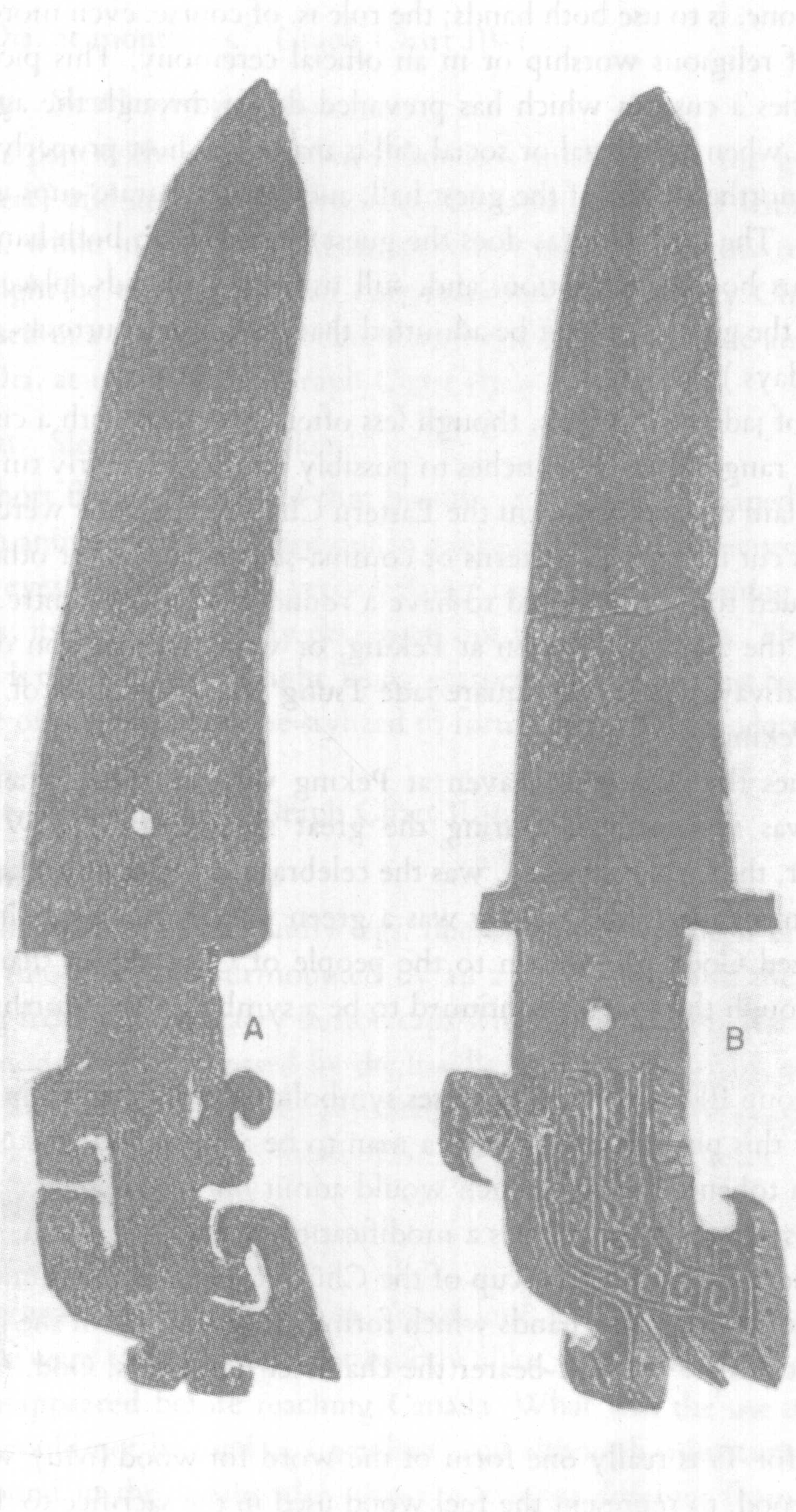


Plate XLIII. Halberds (Ko) with bird or elephant-head design on butt (NR 2966, 2967; pp. 80, 81)



Plate XLVI. Wine container of the Chia type (NR 3213; p. 76)

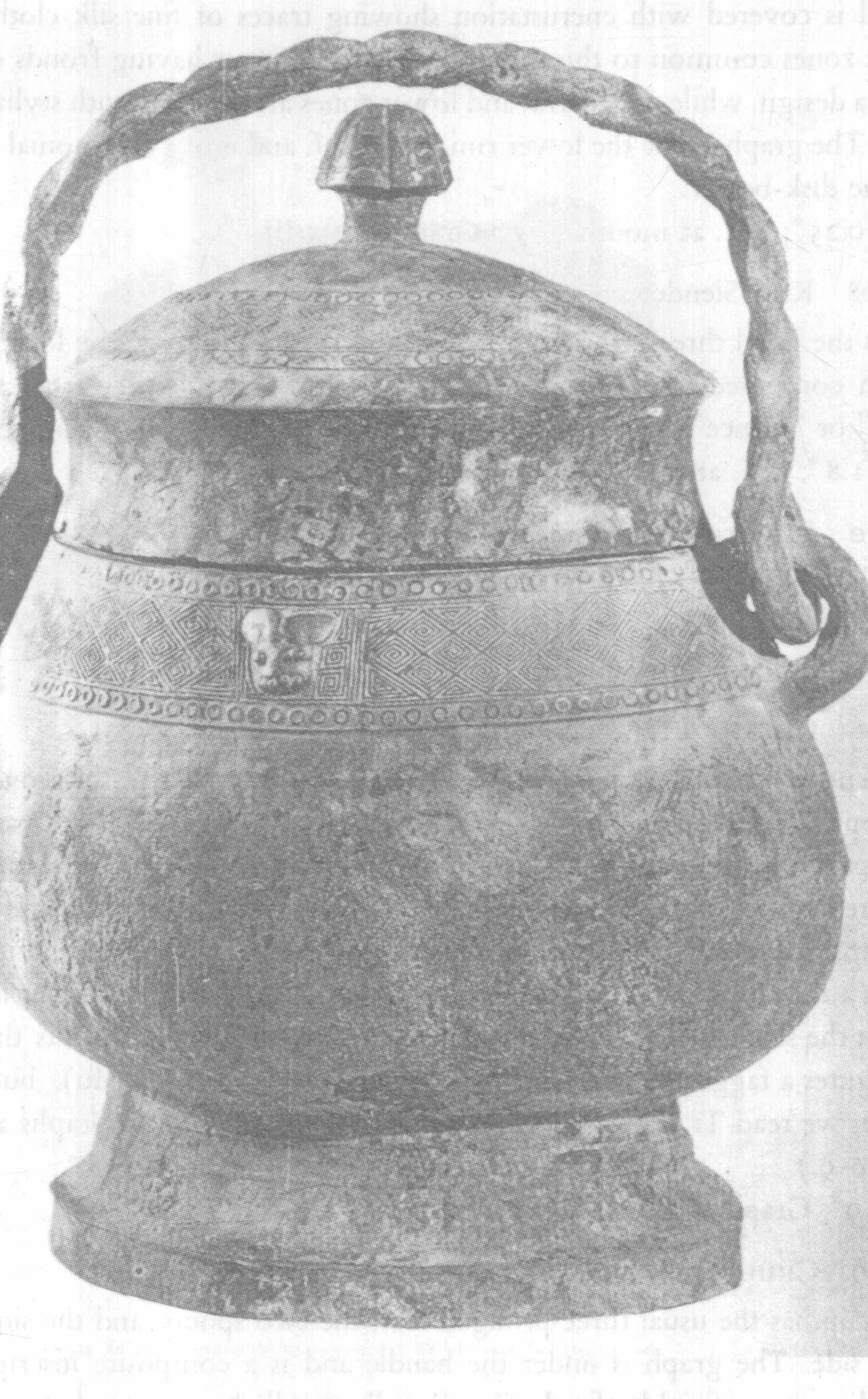


Plate XLV. Wine pail of the Yu type (NR 3222; p. 78)

GROUP III

THE DISK-BEARER SET

Shang. Wu-Ting Period, 1324–1265 B.C. Anyang, Honan

THE BRONZES of the two previous groups are associated with two excavation sites, which are located not far from each other, at Anyang, and appear to be correlated with two persons.

The graphs and symbols on the objects in Group I are those of Tiger, the son (or prince), the halberd-bearer, and the Ya cross with a standing man holding a wand. The large number of knives and weapons would indicate the commemoration of a military official of high rank. The evidence points to a personage of royal status, who held an important post or posts at the court, one of which was that of bearer of the ceremonial halberd (see Appendix D).

The objects of Group II, with their dominant graph of the man carrying the halberd, might well relate to the same person who is the centre of Group I. The tomb—if it was a tomb, though it might have been an ancestral shrine—could have been that of a close relation, or a member of a clan whose perpetual office at court was that of bearer of the ceremonial halberd, and whose family crest consequently might be the graph of the halberd-bearer.

Group III, made up of objects displaying the pictograph of the Bearer of the Pi Disk, or symbol of Heaven, is also associated with the two previous groups. Some of the vessels of Groups II and III are almost identical, and if there were no distinguishing pictographs they would have to be accepted as from one set of vessels. As it is, some vessels of Group II came to the Royal Ontario Museum with vessels of Group III, and only the inscriptions enabled the cataloguers to locate the objects in their proper group.

The objects in Groups I and II are mainly concerned with official ceremonial and sacrifice, and have very little religious significance, except as may be indicated by pictographs of Ta-Yü ("great rain") on the Yu vessel (Plate VIII), and the Ta-Yü (using another character as homophone for "rain") found on some of the spearheads. These pictographs may refer to an official whose function was to pray for rain—this was possibly one of the duties of the halberd-bearer.

Group III, on the other hand, has as its dominant graph a symbol which is significantly religious. It is made up of a sacrificial vessel, a tripod of the Li type of which only two legs are apparent, held up by two hands; and above this a stylized outline of a man holding in both hands (not clearly apparent yet very definitely suggesting two hands) a disk of the Pi type.

In China the only correct way in which to present anything to anyone, or to receive anything from anyone, is to use both hands; the rule is, of course, even more firmly enjoined in the solemnity of religious worship or in an official ceremony. This pictograph of 3,000 years ago exemplifies a custom which has prevailed down through the ages to the present time. For example, when an official or social call is made, the host properly invites the guest to be seated at the northeast end of the guest hall, and tea in separate cups is brought in on a tray by the servant. The host rises (as does the guest) and takes in both hands the teacup for the guest, makes his bow of salutation, and, still using both hands, places the cup on the table by the side of the guest. (It must be admitted that such little courtesies are fast dying out in these changing days.)

The Pi is a disk of jade (sometimes, though less often, of stone) with a circular hole in the centre. Its diameter ranges from two inches to possibly two feet. In early times the disks were small and usually plain of surface, but in the Eastern Chou period they were sometimes quite large, with surfaces cut in "grain" patterns or comma-shaped spirals, or other designs. However, the Pi continued to be round and to have a round hole in the centre. It was a symbol of Heaven, and so the Altar of Heaven at Peking, or wherever the Son of Heaven should have his capital, is always round; the square jade Tsung was the symbol of Earth, and so the Altar of Earth at Peking is square.

Until recent times the Altar of Heaven at Peking was the place where Shang-Ti, the Supreme Ruler, was worshipped. During the great sacrifice of the Winter Solstice, at which the Emperor, the Son of Heaven, was the celebrant, a tablet with the name of Shang-Ti was set forth on the altar, and nearby was a green jade Pi, the symbolic Heavenly Disk. This disk symbolized God and Heaven to the people of China more than thirty centuries ago, and down through the years it continued to be a symbol in the worship of Ti, the God of Heaven.

The graph of Group III, therefore, expresses symbolically man's worship of God; and one could almost fancy this phantom outline of a man to be a disembodied soul holding up the Heavenly Disk as a token or tessara which would admit him to Heaven.

One vessel in this group (NB.3196) has a modification of the disk graph, which yet retains the basic religious idea. It is a libation cup of the Chüeh type, and it has under its handle the ceremonial vessel held up by both hands which forms the lower half of the graph, but for the upper half it substitutes for the disk-bearer the character Ti, that is, God. (See Graph Chart III-8.)

The pictograph for Ti is really one form of the word for wood (Mu), written as a faggot of three sticks of wood, to represent the fuel wood used in the sacrifice to Ti. Usually the Ti character has a fourth line placed horizontally at the centre to bind the sticks together, but early Chinese script was occasionally abbreviated by omitting a stroke or two, when possible without confusing the meaning. In this instance, the confined space under the handle would warrant the omission. (Cf. Appendix C: Ceremonial Graphs and Key, Line H, Nos. 6–9; also Line D, No. 2.)

OBJECTS IN THE DISK-BEARER SET

1 NB.3193 CHIA Tripod wine container PLATE XLVII

Similar to NB.3213 of Group II. This vessel has three bulbous legs and is shaped for quick heating of contents over a charcoal fire. It has a straight neck, an everted mouth, and to the upper rim are attached two posts with mushroom-shaped caps, decorated with small comma-shaped spiral designs. The handle is small and undecorated, but has a pictograph underneath. The vessel had been covered around the top and the neck with a coarse woven fabric. Brown cuprite is common both inside and outside, with malachite crystals attached. The pictograph is that of an attenuated human figure, holding the sacred Pi disk in his hands, while underneath is a ceremonial vessel held up by two hands. (See Pl. XLVI.)
Ht. 10"; Dia. at mouth 6.75". Graph Chart III-4

2 NB.3195 KUEI Food vessel PLATE XLIX-A

This has a decorative band around the upper rim with stylized animal designs and three masks of feline type in relief. The lower part is also decorated with animal designs. The graph, which is the same as that on NB.3193, is of the Bearer of the Heavenly Disk (Pi), and is inside the vessel at the centre of the bottom. Most of the inside of the vessel shows stains of corroded rice; very probably when it was excavated a sediment of corroded rice was attached to the metal. (A similar Kuei in Group II (NB.3214) had been used to hold millet; the stains are small and round, and lumps of the congealed small-millet still remained in the vessel when found; indeed one solid lump is still inside the bowl.) The jade Pi is a complete round disk with a round hole in the centre. But there is also a split disk in which the circle of jade is sawn through. This must have had a symbolic significance, but no one has yet produced a meaning for it.
Ht. 5.25"; Dia. 7.1". Graph Chart III-3

3 NB.3197 YU Wine pail PLATE XLVIII

This bucket-shaped vessel has a cover and a swing handle and was used to contain wine or other liquids required in the ceremonies. It is elliptical in shape, with a twisted thong type of handle attached to the smaller ends of the bowl. Inside the cover is the pictograph of the disk-bearer; but another pictograph of a bird facing left, is on the inside bottom of the vessel. The shape, style, and decoration of the vessel are identical with those of the Yu vessel of Group II (NB.3222); they differ only in their size and respective graphs. The decoration of the vessel is simple but adequate. Two bands, one on the cover and the other on the neck of the vessel, are in the "thunder" pattern design, with an edging of small circles, and each side is bisected by an animal mask in relief.
Ht. 7.6"; Dia. 6". Graph Chart III-1, 2

4 NB.3194 KU Slender wine beaker PLATE LI-A

The inside of the trumpet-shaped mouth has a golden bronze surface, but otherwise the vessel is covered with encrustation showing traces of fine silk cloth. It has the usual three zones common to this type of vessel, the upper having fronds of delicate stylized cicada design, while the central and lower zones are covered with stylized animal decoration. The graph inside the lower rim is in relief, and is of a ceremonial vessel surmounted by the disk-bearer.
Ht. 10.25"; Dia. at mouth 5.75". Graph Chart III-6

5 NB.2808 KU Slender wine beaker PLATE L

It has the usual three zones common to this type, and inside the lower foot-rim it has a graph composed of four units, including a sacrificial knife, a ceremonial vessel, the "son" or "prince" character, and an unidentified symbol. (Cf. Graph Chart III-7.)
Ht. 11.8"; Dia. at mouth 6.75". Graph Chart III-5

6 NB.2810 LI Tripod bowl

This bowl has bulbous legs for quick heating of liquids or food. It carries a graph within the mouth of the bowl, showing a dedication to Fu-Yi, or Father Yi.
Ht. 6.25"; Dia. at mouth 5.4"

7 NB.3196 CHÜEH Libation cup PLATE XLIX-B

This cup is heavily incrusted with malachite globules. Traces of woven cloth adhere to the top. There are extended flanges, and masks in high relief of ram pattern, each flanked by a pair of K'uei dragons. The legs on this cup are also decorated; and breakages have required restorations. The handle on the side is of bovine type; and the knobs on the two upright posts are of conical shape with stub ends. The inscription is under the handle, and is a modification of the graph common to Group III. The lower half of the inscription is the same as that of the disk-bearer; but the upper half omits the disk-bearer and substitutes a faggot of sticks, which may be read "wood" (Mu), but which, as stated above, we read Ti or God. (Cf. Appendix C: Ceremonial Graphs and Key; Line H, Nos. 6–9.)
Ht. 9.9". Graph Chart III-8

8 NB.2809 CHÜEH Libation cup PLATE LIII

This cup has the usual three pronged feet, the two spouts, and the single handle on the right side. The graph is under the handle and is a composite inscription of six units, including a sacrificial knife, the "son" or "prince" character, a dedication to Father Chi (Fu-Chi), and two incomplete characters. (Cf. Graph Chart III-5.)
Ht. 8.5". Graph Chart III-7

9 NB.4063 KU Slender wine beaker PLATE LII-A

This vessel has the usual three zones: a trumpet-shaped mouth at the top, a barrel-shaped zone at the centre, and an extended tapering zone at the bottom. Inside the base zone is an

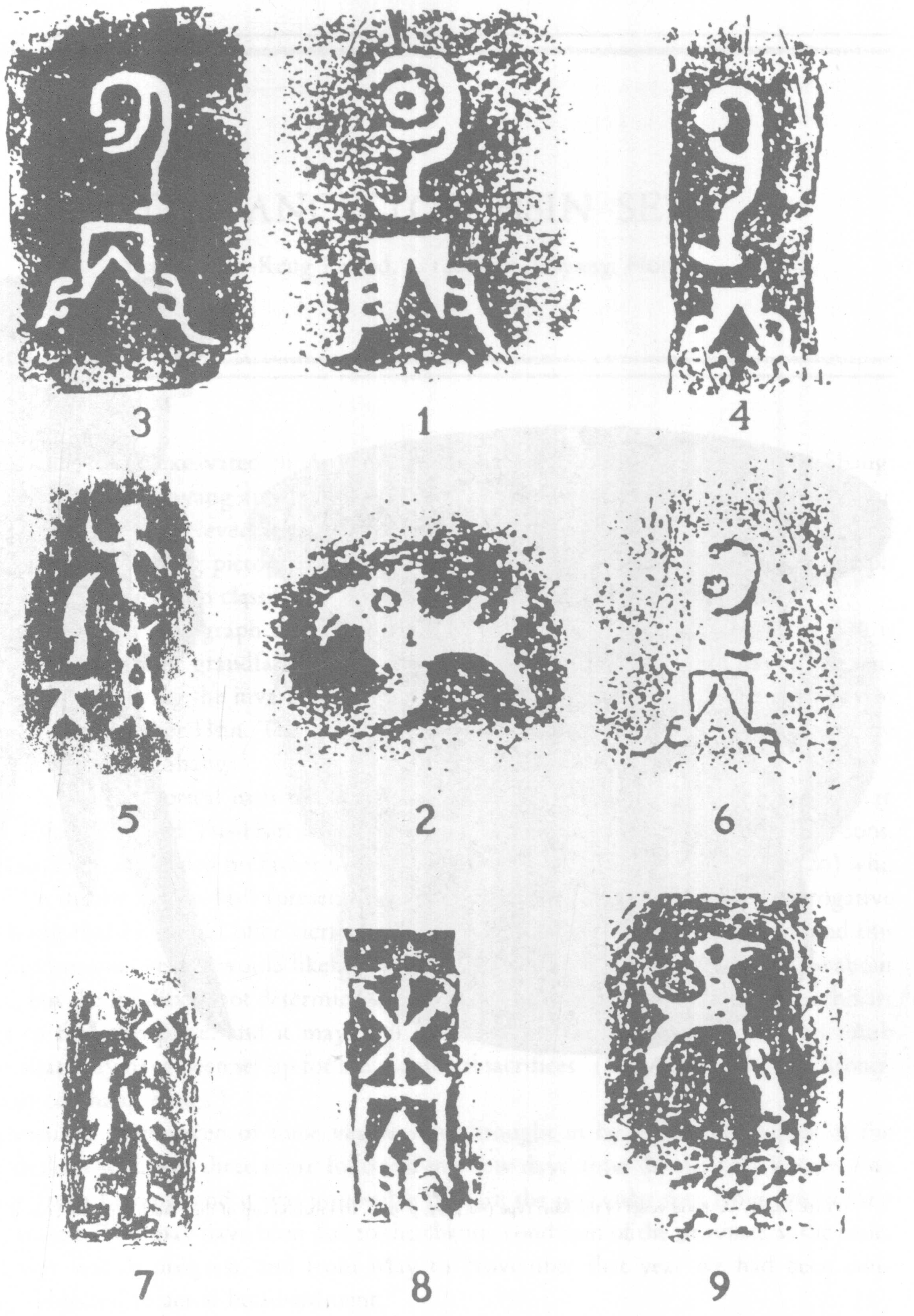
inscription of a "treasure box" and an arrow. This forms a pair with the next object (NB.4064).
Ht. 12.5"; Dia. at mouth 6.5". Graph Chart IB-3

10 NB.4064 KU Slender wine beaker
This forms a pair with NB.4063 above, but it is smaller, and the graph, which is also "treasure chest" and arrow, is different in size, and is arranged with arrow up-pointed on the right, while in the graph of the previous vessel the arrow is up-pointed on the left. This might be taken as further corroboration that in early China, where pairs of vessels are used in a set, they are differentiated one for the left side and one for the right.
Ht. 11.3"; Dia. at mouth 5.2". Graph Chart IB-4

11 NB.4065 KU Slender wine beaker PLATE LII-B
This has a short flaring mouth of thin bronze, and its barrel-shaped central zone is decorated with animal masks, carried out in a series of very fine incised scrolls, with small round knob eyes. It has a scored vertical flange on each side, running through the centre of the masks; its base is similarly decorated but without flanges. The pictograph inside the base-rim is of a bird facing right, being grasped by an up-thrust hand. This pictograph in the course of centuries became stylized to form the present modern Chinese character Ho, to grasp.
Ht. 9.5"; Dia. at mouth 5.5". Graph Chart III-9

12 NB.3225 CHÜEH Libation cup PLATE LI-B
This tripod libation cup has spindly legs, one of which had been broken off and is repaired. The thin handle is surmounted by an animal head; and the two vertical posts which spring from the rim carry button caps with spiral design. The decoration is good, with a fine monster mask centred by the handle, and another mask on the opposite side centred by a flange, and cicada designs surround the mouth. The graph under the handle is an archaic form of "Ping"—the third of the Ten Celestial Stems.
Ht. 6.5". Graph Chart II-8

13 NB.2974 Miniature elephant PLATE XXXIV-1
This small bronze elephant is in the round, not solid but hollow, with an opening below. There were two of these, not exactly alike, but both of the same general type. The other disappeared before reaching Canada. What was the use of this little object? It obviously could not be used as a pendant; and although miniature ceremonial vessels have been found in the tombs, this object was quite different from ceremonial types. It may have been simply a Ming-ch'i or funeral object placed in the tomb at burial. It is a matter of interest that with these two small elephants, a small stylized elephant head, carved in white marble and only three inches long, was brought in, which is now number NB.2975 in the Shang collection of the Museum.
L. 1.5"



GRAPH CHART III 1. Yu: NB.3197 (cover); p. 96. 2. Yu: NB.3197 (vessel); p. 96. 3. Kuei: NB.3195; p. 96. 4. Chia: NB.3193; p. 96. 5. Ku: NB.2808; p. 97. 6. Ku: NB.3194; p. 97. 7. Chüeh: NB.2809; p. 97. 8. Chüeh: NB.3196; p. 97. 9. Ku: NB.4065; p. 98



PLATE XLVIII. Covered wine container of the Yu type (NB.3197; p. 96)



PLATE XLVII. Wine container of the Chia type (NB.3193; p. 96)



PLATE XLIX. A. Food vessel of the Kuei type (NB.3195; p. 96). B. Libation cup of the Chüeh type (NB.3196; p. 97)

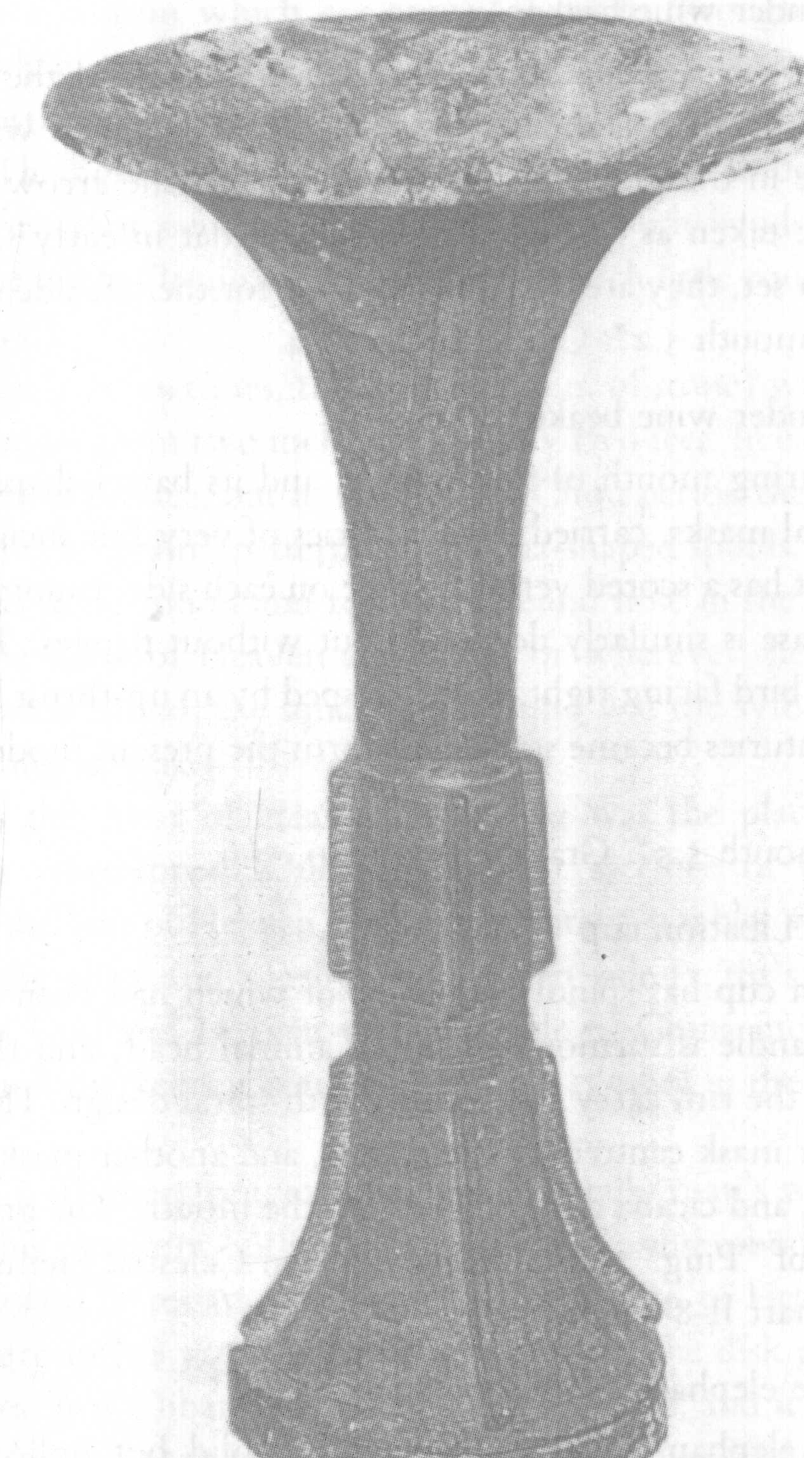


PLATE L. Wine beaker of the Ku type (NB.2808; p. 97)



PLATE LI. A. Wine beaker of the Ku type (NB.3194; p. 97). B. Libation cup of the Chüeh type (NB.3225; p. 98)

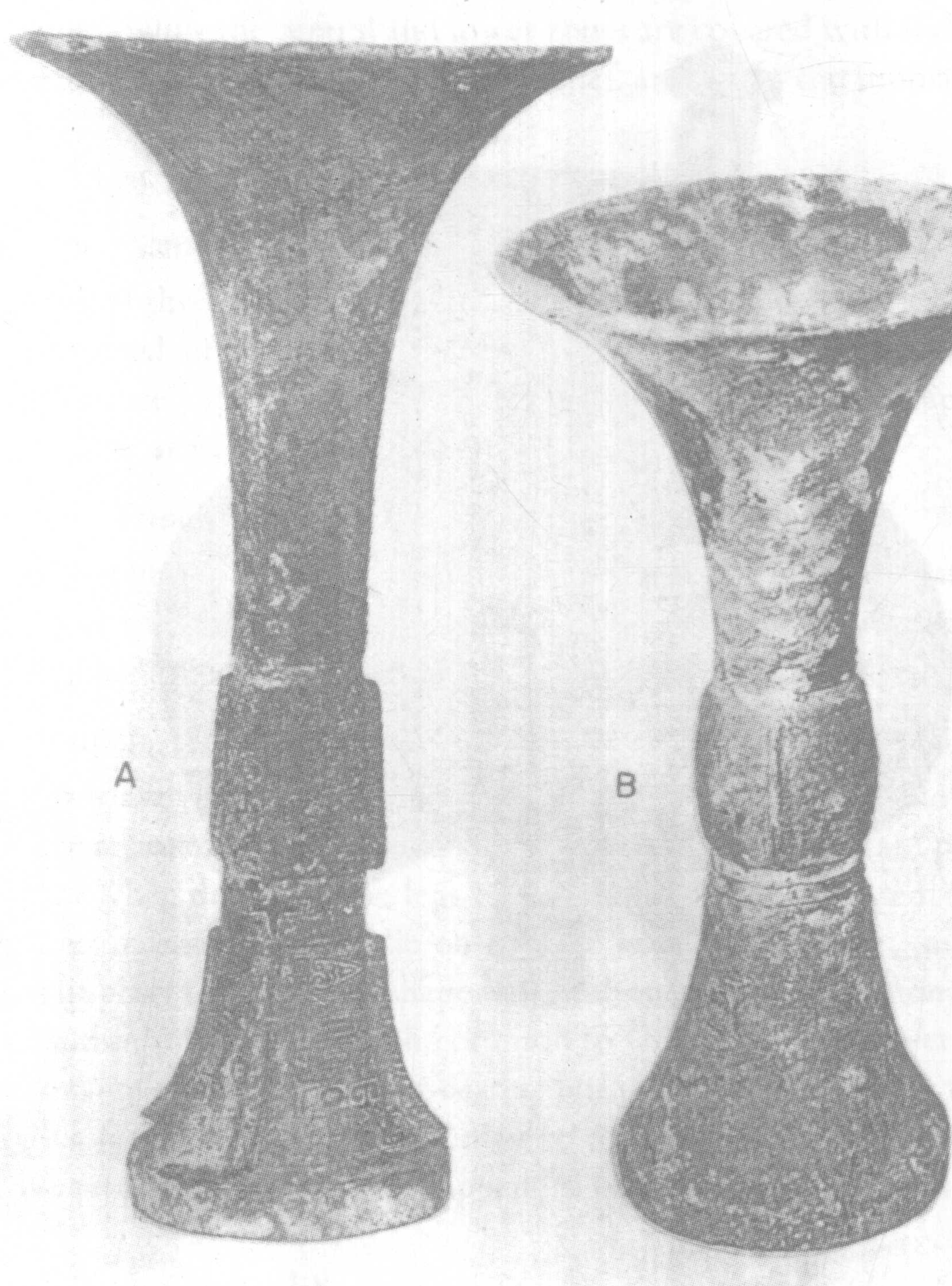


PLATE LII. Wine beakers of the Ku type (NB.4063, 4065; pp. 97, 98)



PLATE LIII. Libation cup of the Chüeh type (NB.2809; p. 97)

GROUP IV

THE ANCESTOR HSIN SET

Shang. P'an-Keng Period, c. 1400 B.C. Loyang, Honan

IF THIS SET had been excavated in Anyang it could have been dated definitely as Shang, but it came from the Loyang area in Western Honan, which is a Chou dynasty locality (see Map C, Appendix H). Nevertheless, the characteristic forms and designs of these vessels, and particularly the Shang pictograph on all but four of them—the others having no graph at all—make it necessary to classify the set as Shang somewhere about 1400 B.C.

There is only one pictograph on the vessels, that of the two characters Tsu-Hsin. Tsu is the word for ancestor or grandfather; Hsin is the cyclical sign for the eighth day of the ten-day cycle, and following the invariable Shang custom this would designate the natal day of Ancestor or Grandfather Hsin. The brevity of the graph and the use of the cyclical day are both characteristically Shang.

There is a more historical basis for this Shang attribution. Among the Shang kings there is a king (No. 15) called Tsu-Hsin who acceded to the throne in 1506 B.C. One of his sons, named Tsu-Ting, succeeded his father in 1465 B.C.; and his son was P'an-Keng (No. 20) who came to the throne at Yin-Hsü (present-day Anyang) about 1400 B.C. It was a prerogative of P'an-Keng that he should offer sacrifices in honour of his grandfather Tsu-Hsin; and this group of ceremonial vessels would likely be used in those sacrifices. The date would be about 1400 B.C., but the locality is not determined. King Tsu-Hsin lived at Pei, but Chinese scholars have yet to find this place, and it may well have been in the Lo valley, where his tomb shrine or altar may have been set up for the memorial sacrifices. (See Appendix A: Chronological List of Shang Kings.)

In November 1930, seven of these vessels were brought in by Loyang members of the Kaifeng dealer's staff, and three more followed in a few days' time. It was only known that they came from Loyang, and it was impossible to learn the particular spot from which they were excavated. This may have been due to the chaotic condition of the province at the time, for civil war was in progress, and from May to November that year we had been continuously subjected to aerial bombardment.

The first vessels included a Tsun wine beaker (No. 1, NB.2716), a Kuei food vessel (No. 2 NB.2719), a pair of Ku wine beakers (Nos. 3 and 4, NB.2717, 2718), a pair of Chüeh libation

cups (Nos. 5 and 6, NB.2720, 2721), and a Chih beaker (No. 7, NB.2722) made, not of bronze as all the others were, but of pewter. All had the pictograph of Tsu-Hsin, except the pewter Chih and the two Chüeh—which had no graph of any kind. The two Chüeh were unique in that neither had a handle attached to the side of the cup.

A few days later three more vessels arrived. There was another pair of Chüeh libation cups (Nos. 8 and 9, NB.2763,2764), this time with the usual handle on the side, under which was the graph Tsu-Hsin. The other vessel was a tripod cooking vessel of the Ting type (No. 10, NB.2765) which did not carry a graph (Plate LIV). There must have been many more vessels in the complete set, but these have not been brought to our knowledge except a bronze Chih, with the same Tsu-Hsin graph.

One matter of interest in regard to this set is that the two pairs of uprights that spring from the rims of the Chüeh libation cups have different tops or knobs. One pair has the so-called "inverted beaker" shape, while the other has the conical "mushroom"-shaped top. There have been attempts to consider these two kinds of knobs as characteristic of two periods of history, but the finding of these vessels together seems to point to a contemporary use of the two types.

The unique form of the Chüeh has been the subject of conjecture, and some students have suggested that its shape evolved from that of a bird. It has three solid legs (very seldom four) of a kind that would allow of its standing over a charcoal fire to heat its liquid content, and that it was so used is proved by the smoke-blackened surface of most of these cups. It has two different spouts, one flat and pointed, and the other trough-like and semicircular.

We know that the early Chinese were right-handed, as they are today. There is only one handle to the cup, and when this is held in the right hand the cup comes into proper alignment for use. That is, the pointed spout is directed away from the person holding the cup, which is convenient for pouring the libation, while the trough-like spout is in a ready position for the holder to drink from the cup. From what the writer has seen of the Confucian sacrifices in the temple at the Summer and Winter Solstices, he would assume that the wine is drunk ceremonially from the cup by the trough-shaped spout, and the remainder of the contents poured in libation from the pointed spout.

A Confucian scholar once told the writer that he had found a reference to the Chüeh cup in early Chinese literature, indicating that in drinking from it the two knobs should be in line with the eyebrows. Since the bowl of the cup is bulbous, this would allow a small quantity of wine to remain in the cup for the libation. Up to recent times Confucian scholars and officials used to spend hours daily practising the ceremonial movements that would be required in the sacrifices or at official or court functions; and doubtless in early times the proper use of the Chüeh cup would necessitate considerable rehearsal.

This evidence that wine was heated for ceremonial use in ancient China suggests that it was at that time the custom to heat wine for ordinary drinking, just as it is in China today.

OBJECTS IN THE ANCESTOR HSIN SET

1 NB.2716 TSUN Wine beaker — PLATES LIV, LV

This vessel has a slightly bulbous band at the centre, with four small oval bosses hidden by encrustation. Its patina ranges from greens to purple and brilliant azurite on the base and inside bottom. The inscription on the inside bottom is of the two archaic characters "Tsu-Hsin"—Ancestor Hsin.
Ht. 9"; Dia. 7". Graph Chart IV-1

2 NB.2719 KUEI Food vessel — PLATE LVI

This container has a cylindrical foot-rim, a slightly flaring mouth, and heavy vertical handles with animal mask and pendent tongue. There are bands of scroll decoration under the top-rim and on the foot-rim. Patina of purple and green encrustation with azurite. The Tsu-Hsin graph is inside the vessel.
Ht. 5"; Dia. 6.75". Graph Chart IV-2

3 NB.2717 KU Slender wine beaker — PLATE LIX-A

This beaker has a trumpet-shaped mouth, a flaring foot, and a band with two slight flanges encircling the body. Mottled patina of green and pale purple. The Tsu-Hsin graph is inside the foot-rim.
Ht. 8.3"; Dia. 4.75". Graph Chart IV-3

4 NB.2718 KU Slender wine beaker — PLATE LIX-B

This beaker forms a pair with NB.2717. Multicoloured encrustation, with the base a vivid azurite. Graph: Tsu-Hsin.
Ht. 8.3"; Dia. 4.9". Graph Chart IV-4

5 NB.2720 CHÜEH Libation cup — PLATE LVII-A

This cup was made without a handle, and has no inscription. A single rib encircles the body, and the usual two upright posts, with inverted beaker-shaped tops, spring from the rim of the cup. Brown and green patina.
Ht. 7.6"

6 NB.2721 CHÜEH Libation cup — PLATE LVII-B

This cup was made without a handle, and with no inscription. It forms a pair with NB.2720. Brown patina.
Ht. 7.5"

7 NB.2722 CHIH Small pewter beaker

This vessel is without an inscription. A similar Chih made of bronze, and carrying the graph of Tsu-Hsin, has appeared in a collection in China. This beaker is in bad condition

through disintegration of the metal. (See *Shang Chai Chi Chin Lu*, Vol. 5, p. 55, for a Chih with Tsu-Hsin graph.)
Ht. 3.25″

8 NB.2763 CHÜEH Libation cup PLATE LVIII-A

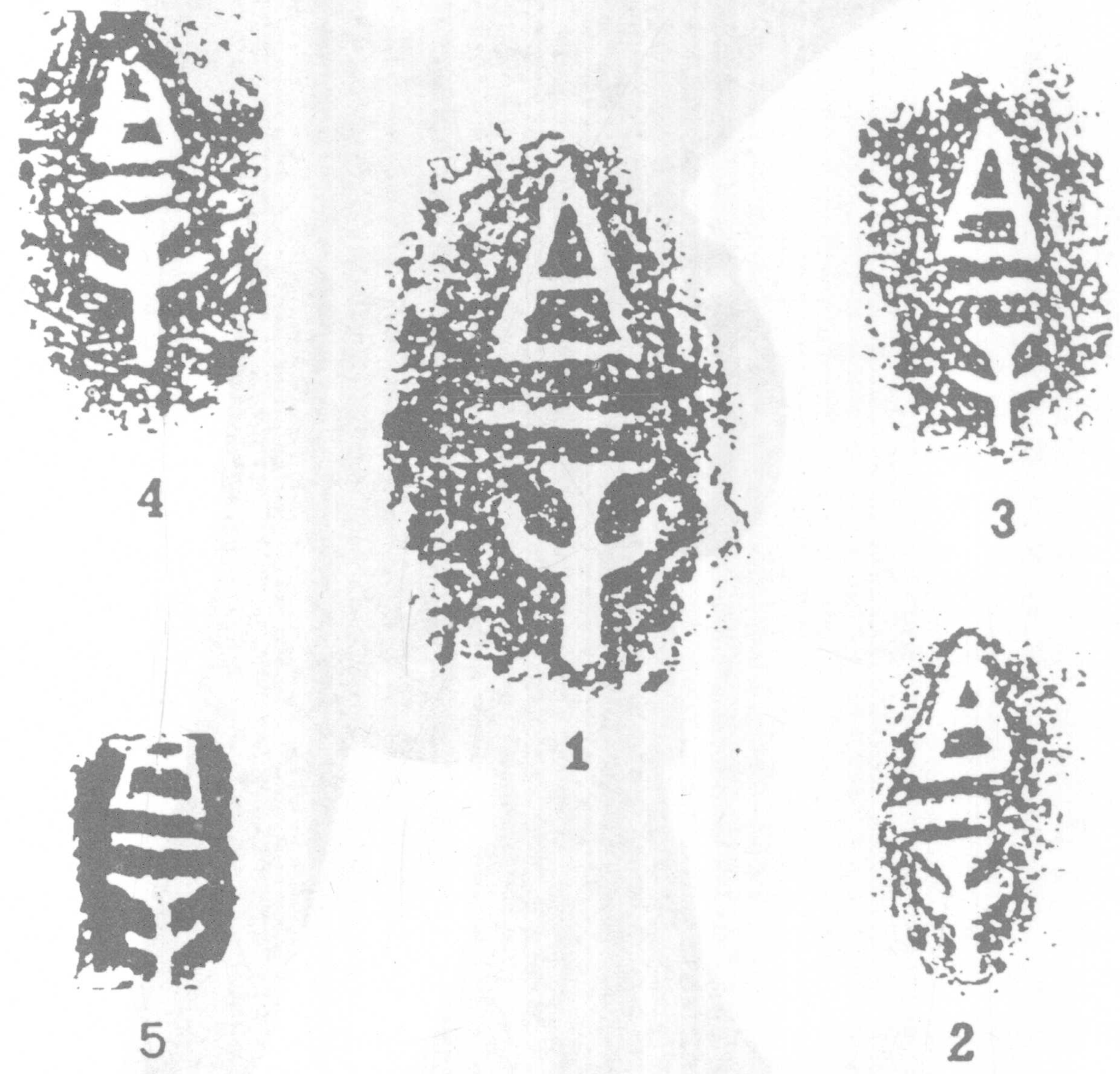
This cup has three spindly legs, the usual single handle on the right side, and under the handle the graph of Tsu-Hsin. It has two posts on the rim, each topped by a shallow domed cap. It has a mottled patina, and the design is obscured. It forms a pair with NB. 2764.
Ht. 7.5″

9 NB.2764 CHÜEH Libation cup PLATE LVIII-B

This cup has three spindly legs, the usual single handle on the right side, and under the handle the Tsu-Hsin graph. It has two posts, with shallow domed caps. The patina is plum-coloured with patches of deep blue and heavy green encrustation. It forms a pair with NB.2763.
Ht. 7.25″. Graph Chart IV-5

10 NB.2765 TING Tripod food cauldron

It has cylindrical legs and an extended rim on which are attached two upright loop handles. There is a band of decoration nearly one inch wide under the rim. The metal is thin, the body badly broken, and one leg missing. It has no graph.
Ht. 8.6″; Dia. approx. 7″



GRAPH CHART IV 1. Tsun: NB.2716; p. 109. 2. Kuei: NB.2719; p. 109. 3. Ku: NB.2717; p. 109. 4. Ku: NB. 2718; p. 109. 5. Chüeh: NB.2764; p. 110



PLATE LIV. The ten objects in the Ancestor Hsin Set



PLATE LV. Wine beaker of the Tsun type (NB.2716; p. 109)

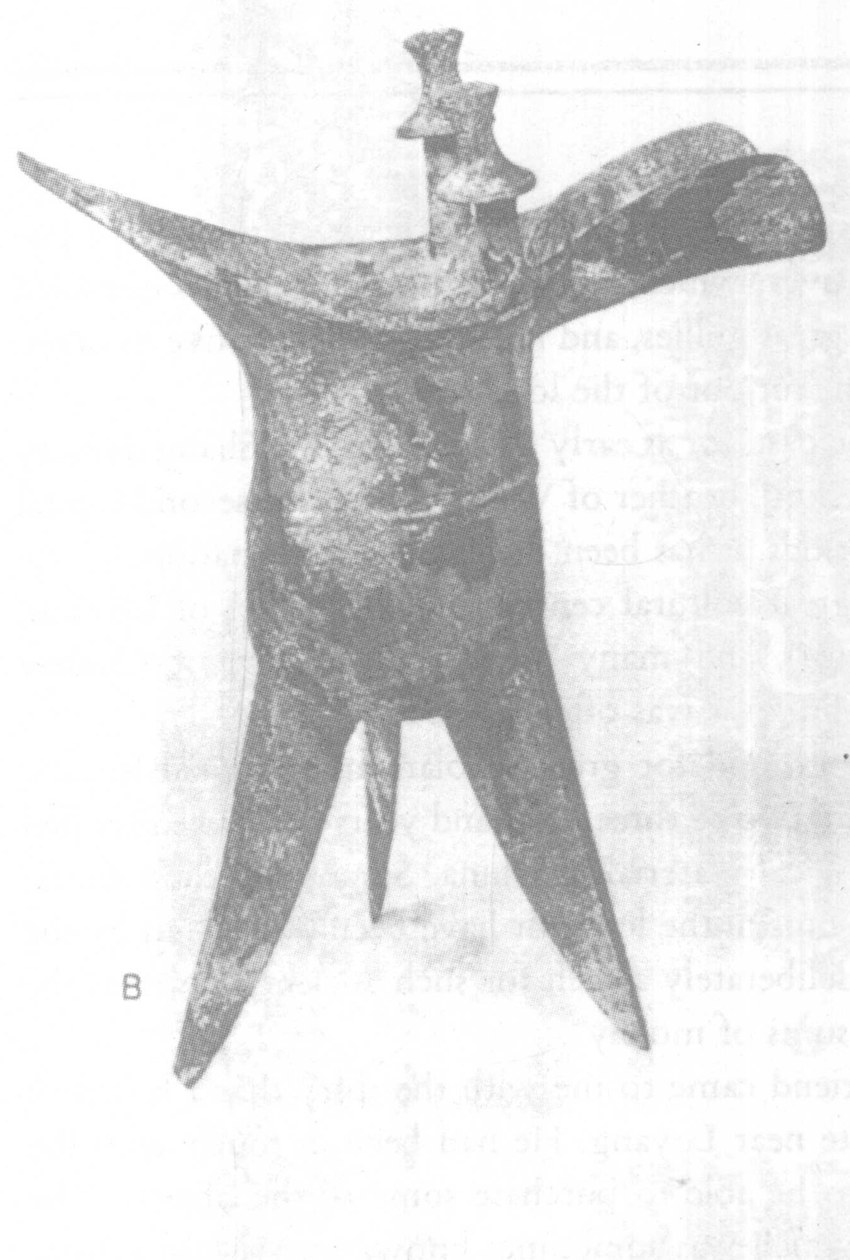


PLATE LVII. Pair of libation cups of the Chüeh type (NB.2720.2721; p. 109)



PLATE LVI. Food vessel of the Kuei type (NB.2719; p. 109)

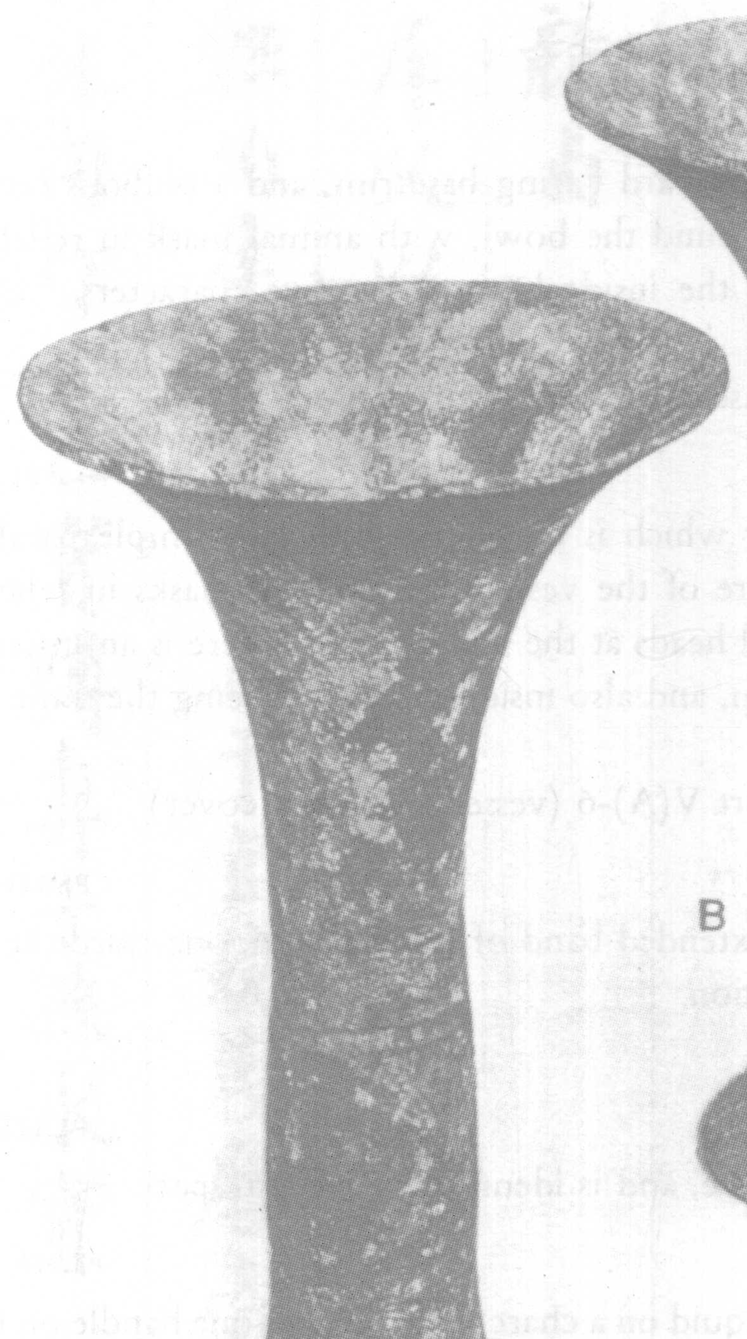


PLATE LIX. Pair of wine beakers of the Ku type (NB.2717, 2718; p. 109)

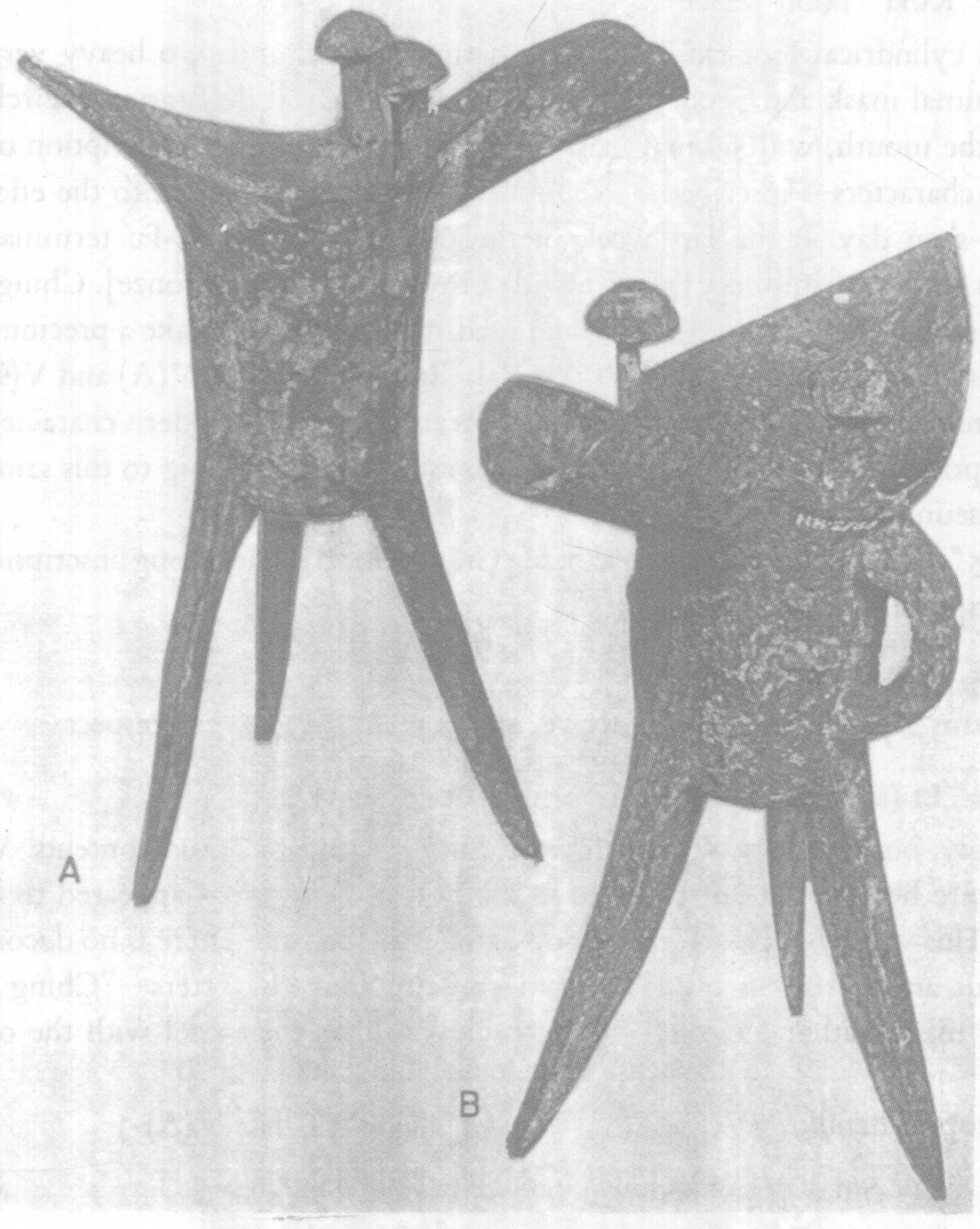


PLATE LVIII. Pair of libation cups of the Chüeh type (NB.2763.2764; p. 110)

GROUP V

THE MANG SHAN SET

Early Chou. Ch'eng Wang Period. 1115–1077 B.C. Loyang, Honan

THE MANG MOUNTAINS (Mang Shan) is a range of loess hills situated between the city of Loyang in Western Honan and the Yellow River, which, north of the Mang, flows eastward to the Pacific Ocean. The area is slashed by great gullies, and most of the people live in caves, sometimes two and even three storeys high, cut out of the loess soil.

The city of Loyang has a long and historic past, for as early as the end of the Shang dynasty (1122 B.C.), it was selected by the Duke of Chou, brother of Wu Wang, as the second capital of the state. Later, at different historical periods, it has been the capital of the nation.

In China's Classical age Loyang was a great cultural centre, and the names of Lao-tzu, K'ung-tzu (Confucius), Meng-tzu (Mencius), and many other great leaders of Chinese culture are linked with Loyang, or Honan Fu, as it was often named.

The Mang range was a favourite burial ground for great scholars and national leaders. Excavations on tomb sites, some of which are two to three thousand years old, have revealed it as one of the richest sources of archaeological material in China. Sometimes these burial locations have come to light through wash-outs in the loess, or have been uncovered by the farmer's plough, but the local people also deliberately search for such ancient tombs, as the ancient objects obtained may sell for large sums of money.

In the early autumn of 1926 a Chinese friend came to me with the story that a hoard of burial bronzes had been discovered on a site near Loyang. He had been in touch with the farmers who owned the land, and hoped to be able to purchase some of the objects. The locality was at Miao-kou (Temple Moat), which was sometimes known as Ma-kou (Horse Pit), and was just abour four miles northeast of the city of Loyang. Ma-p'o (Horse Cliff), a place noted for its finds of ancient vessels, was a short distance west of Ma-kou. (See Map C, Appendix H.) This site could not really be called a tomb, for the objects were irregularly lodged in the virgin soil.

In time fourteen of these vessels came to the Royal Ontario Museum, and are known as the Mang Shan set. A more correct name would be the Ching Fu-Yi set, for the dedication, incised in archaic script on most of the objects was to Father Yi of Ching. (See Graph Charts V (A), (B), (C).)

Naturally, our greatest interest was centred in the inscriptions, for proof of date or association with some historical personage or incident. Nothing very startling was found on the first few objects, but the Chinese friend said he had heard some of the men concerned mentioning that one of the objects had a long inscription, and that it had been sent to Peking probably for the larger prices that could be obtained in that city. He said he would try to trace it down.

Six months later famine relief duties had taken me to Peking, where I stayed with my friends Dr. and Mrs. J. C. Ferguson. One day they told me that a Chinese from Honan had come and desired to see me. It was my friend from Kaifeng. He had traced the inscribed vessel to Peking, and found not one only, but two such vessels. He had brought them to me. He unfastened the blue cloth wrapping, and showed me the two Kuei bowls, which are now NB.2672 and NB.2673 of the Mang Shan group of bronzes.

More could be written of the interest taken in these two bowls by scholars in Peking, particularly the Professor of Archaeology of Peking University, and another famous archaeologist. The latter took Dr. Ferguson and myself into the "inner apartments" of his home, and his clever young daughter, an expert in archaic Chinese writing, transcribed the inscription on the bowl into modern script, and helped greatly in its interpretation. The two bowls were a pair, and the inscriptions cast on the inside bottom of each bowl were identical. (See Graph Chart V (B).)

Dr. Kuo Mo-jo, an eminent scholar of early Chinese culture, also showed an interest in these vessels, and has described them in his publications.[1] He speaks of them as the "Ching" vessels, and reproduced ink-rubbings of the inscriptions on the two Kuei vessels. He also reproduced an inscription on another vessel of the Yu type, which no doubt belonged to this group also, but which the Museum did not obtain. He transcribed the archaic script of these vessels into modern Chinese script, and we have taken the liberty to use his transcriptions in Graph Chart V (C).

From the style of the inscriptions, and other evidences, we place this set in Early Chou, probably in the Ch'eng Wang period (1115–1077 B.C.). The vessels of this group, minus the laver, have been reproduced in the *Journal of Oriental Studies*.[2] (See Plates LX, LXI.)

OBJECTS IN THE MANG SHAN SET

1 NB.2663 HO (or HUO) Wine pot — PLATE LXIII-A

This is shaped like a teapot, and is usually known as a wine mixer. It has four bulbous legs, one vertical handle, immediately opposite the spout, and a lid originally connected with chain links. The main decoration is a band of dragon designs around the neck of the

[1] Kuo Mo-jo: *Liang Chou chin wen tz'u ta hsi k'ao shih* (Tokyo, 1935)

[2] Kyoto, No. 23, March 1953

vessel. The inscription originally comprised four archaic characters inside the cover, but unfortunately these are now indecipherable because of the electrical process used to arrest active corrosion.

Ht. to rim 6"; Dia. at rim 4"×4.5"

2 NB.2662 TSUN Wine beaker — PLATE LXIII-B

It has a wide flaring top-rim, an outward flaring base-rim, and a bulbous centre. It is decorated with two simple lines around the bowl, with animal mask in relief on two opposite sides. The inscription on the inside bottom has five characters, "Ching tso Fu-Yi lu."

Ht. 7.4"; Dia. at mouth 6.8", at base 5". Graph Chart VA-1

3 NB.2664 YU Wine pail — PLATE LXVI

It has a swing handle and a cover which is decorated with two simple parallel lines. Parallel lines also encircle the centre of the vessel, with animal masks in relief on the two opposite sides, and also animal heads at the handle ends. There is an inscription of five characters on the inside bottom, and also inside the cover, being the same graph as on the Tsun above (NB.2662).

Ht. to top of cover 8". Graph Chart V(A)-6 (vessel); V(A)-7 (cover)

4 NB.2669 KU Slender wine beaker — PLATE LXVII-A

This vessel is plain, except for an extended band of scroll design, one-third the distance from the bottom. It has no inscription.

Ht. 8.25"; Dia. at mouth 4.6"

5 NB.2670 KU Slender wine beaker — PLATE LXVII-B

This forms a pair with NB.2669 above, and is identical in every respect.

6 NB.2667 CHÜEH Libation cup — PLATE LXVIII-A

This tripod cup is used for heating liquid on a charcoal fire. It has one handle on the right side of the bowl, two spouts, one flat and pointed and the other trough-like, and also two knobbed posts springing from the rim of the cup. The graph of Fu-Yi (Father Yi) is under the handle. It has a decorative band of monsters and thunder scroll encircling the bowl of the cup.

Ht. 8.25"

7 NB.2668 CHÜEH Libation cup — PLATE LXVIII-B

This forms a pair with the NB.2667 above, and is identical in every respect.

8 NB.2665 HSIEN (or YEN) Tripod steamer for grain — PLATE LXV

In this vessel when it was obtained there were lumps of corroded grain, and grain marks are still evident. It has three bulbous, hollow legs, joined to an upper bowl, and inside the vessel these two parts are separated by an angular pierced grid which is detachable.

A decorative band of dragon designs encircles the bowl of the vessel just below the mouth, and two ears of thong design spring from the top of the rim. The inscription is indecipherable in part.

Ht. 12.8"; Dia. at rim 8.25". Graph Chart V(A)-2

9 NB.2672 KUEI Food vessel — PLATE LXX

It has a cylindrical foot-rim, a slightly flaring mouth, and two heavy vertical handles with animal mask and pendent tongue. A band of scroll decoration encircles the vessel below the mouth, with animal mask in relief on each side. An inscription of thirty-two archaic characters is inscribed on the inner bottom of the vessel, to the effect that "On the Jen-shen day in the last week of the 6th moon, Earl Pi-Fu terminated Yu-shih Ching's period of [military] service with a reward of metal [bronze]. Ching proclaimed the praise of Earl Pi-Fu's goodness, and used [the bronze] to make a precious ceremonial Tui [Kuei], dedicated to Father Yi [Fu-Yi]." In Graph Charts V(A) and V(B) a rubbing of the inscription is given, together with a transcription in modern character; and also a transcription of a writing on a Yu vessel, presumably belonging to this same set, which the Museum did not acquire.

Ht. 5.75"; Dia. at rim 8", at base 7.2". Graph Chart V(B) (long inscription) V(C)-A (transcription)

10 NB.2673 KUEI Food vessel

This forms a pair with NB.2672 above, and is identical in every respect.

11 NB.2660 LI (also called LI-TING) Small tripod bowl — PLATE LXIV-A

Its hollow, bulbous legs would allow of quick heating of liquid contents. When found there were heavy traces of charcoal in the bottom, and what appeared to be wine lees inside. This vessel has two vertical loop handles at the rim. There is no decoration whatever, but an inscription inside the rim contains four characters—"Ching tso Fu-Yi," "Ching made Father Yi vessel"—which clearly links the vessel with the others in this set.

Ht. to top of handles 6.75"; Dia. at rim 5.5". Graph Chart V(A)-3

12 NB.2661 LI Small tripod bowl — PLATE LXIV-B

This forms a pair with NB.2660 above, and is identical in every respect.
Graph Chart V(A)-4

13 NB.2671 P'AN Laver or shallow bowl — PLATE LXIX

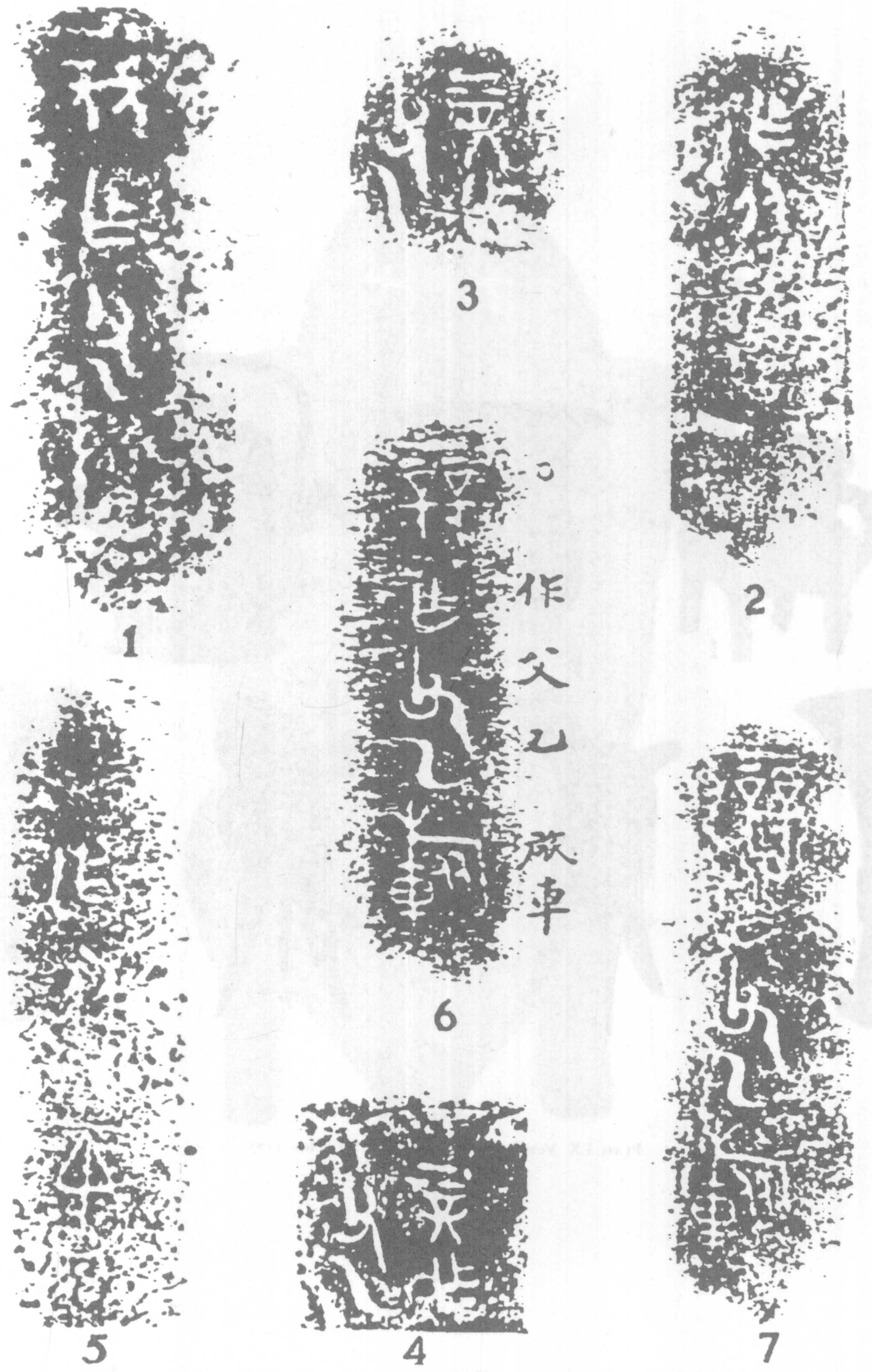
Two loop handles spring from the side, and inside the high base-rim are criss-cross lines in relief on the bottom. It has a decorative border of dragon designs around the rim. The inscription in the centre of the laver is clear except for one character. The vessel has been badly broken and much mended.

Ht. 3.5"; Dia. at rim 12", at base 8". Graph Chart V(A)-5

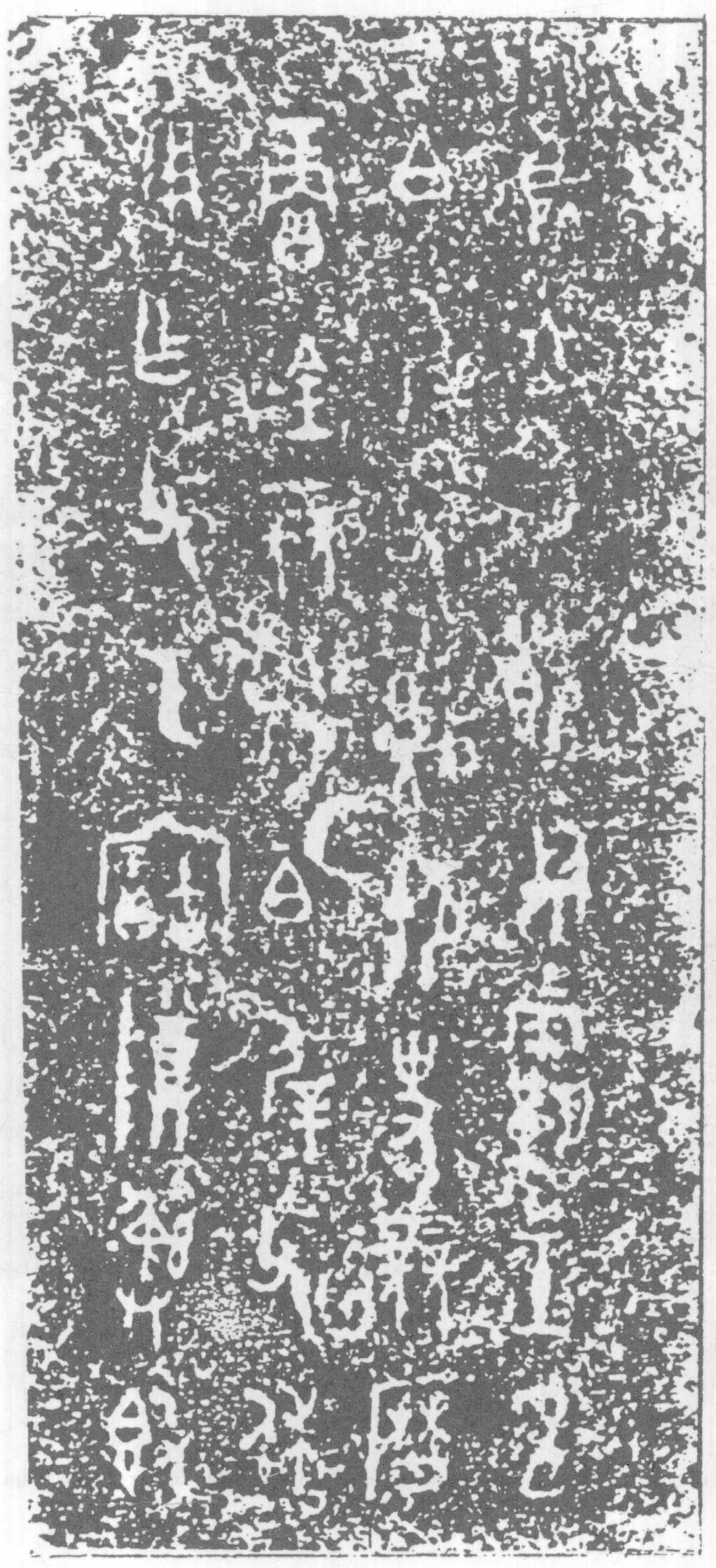
14 NB.2666 TING Food cauldron PLATE LXII

This is a bowl-shaped tripod, with two loop handles springing from the rim. There is a decorative band below the rim, and inside the rim is an inscription of four characters "Ching tso Fu-Yi." The vessel is badly cracked and warped.
Ht. to top of handles 8"; Dia. at rim 7.5"





GRAPH CHART V (A) INSCRIPTIONS 1. Tsun: NB.2662; p. 120. 2. Hsien: NB.2665; p. 120. 3. Li: NB.2660; p. 121. 4. Li: NB.2661; p. 121. 5. P'an: NB.2671; p. 121 6. Yu: NB.2664 (vessel); p. 120. 7. Yu: NB.2664 (cover); p. 120



GRAPH CHART V (B) LONG INSCRIPTION This is found on each of the two Kuei vessels, NB.2672, 2673; p. 121

A 競𣪘
隹六月既死霸壬中伯辟父蔑卯史競曆
賁金競揚伯屖父休用作父乙寶隮彝𣪘

B 競卣
隹伯屖父以成𠂤即東命伐南夷正月既生霸辛
丑在䡴伯屖父皇競各于官競蔑曆賁競章對
揚伯休用作父乙寶隮彝子孫永寶

GRAPH CHART V (C) TRANSCRIPTIONS A. Transcript from the archaic characters of the long inscription of the two Kuei vessels, NB.2672, 2673; translation given on p. 121. B. Transcript of a long inscription on a vessel of the Yu type, undoubtedly belonging to this same group, which Dr. Kuo Mo-jo has published in his book *Liang Chou chin wen tz'u ta hsi k'ao shih* (Tokyo, 1935)



PLATE LX. Vessels of the Mang Shan Set (Nos. 1–7)



PLATE LXI. Vessels of the Mang Shan Set (Nos. 8–14)

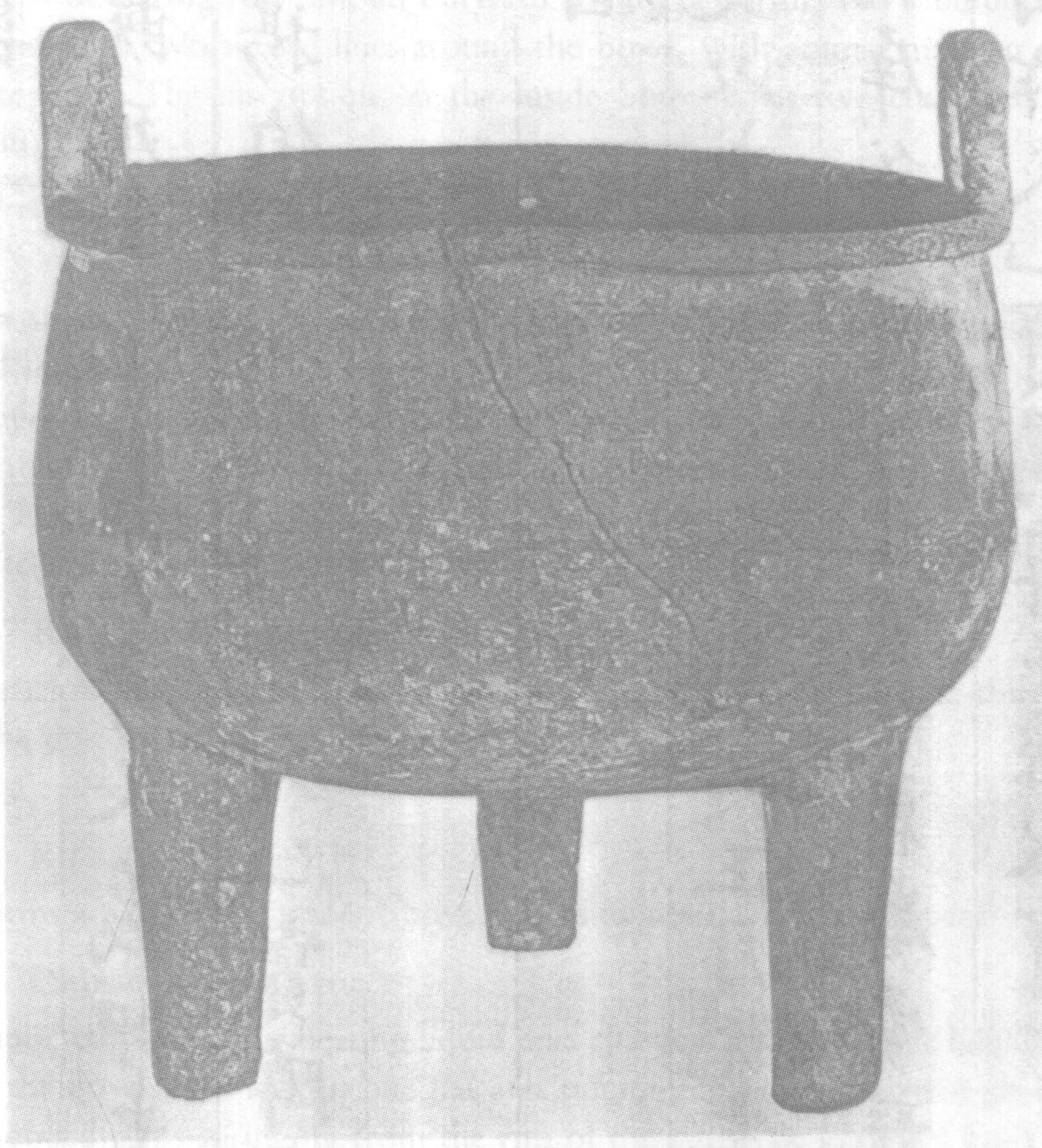


PLATE LXII. Food cauldron of the Ting type (NB.2666; p. 122)



PLATE LXIII. A. Wine pot of the Ho type (NB.2663; p. 119). B. Wine beaker of the Tsun type (NB.2662; p. 120)



PLATE LXV. Tripod steamer of the Hsien type (NB.2665; p. 120)



PLATE LXIV. Pair of small bowls of the Li type (NB.2660,2661; p. 121)

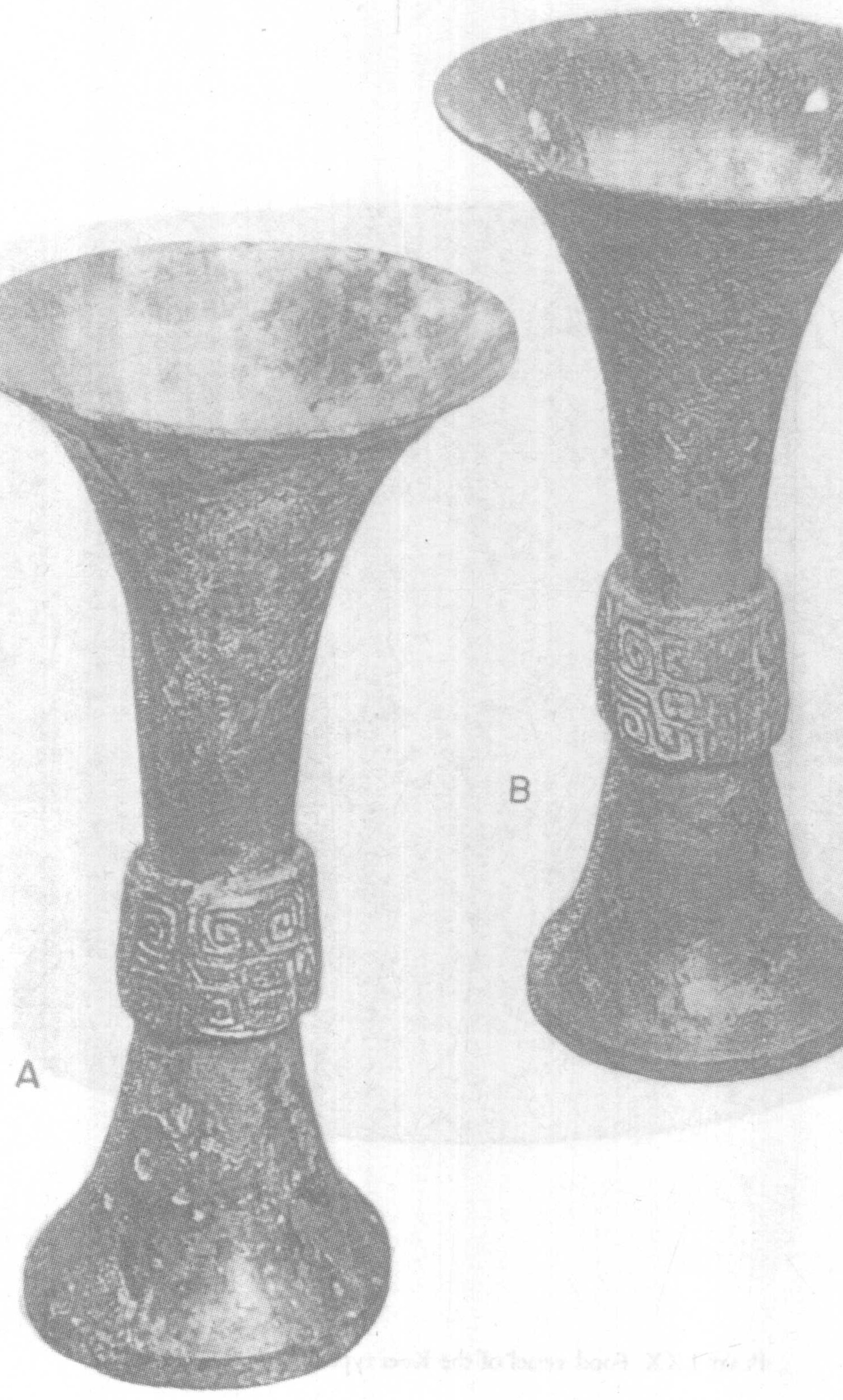


PLATE LXVII. Pair of wine beakers of the Ku type (NB.2669,2670; p. 120)



PLATE LXVI. Wine pail of the Yu type (NB.2664; p. 120)

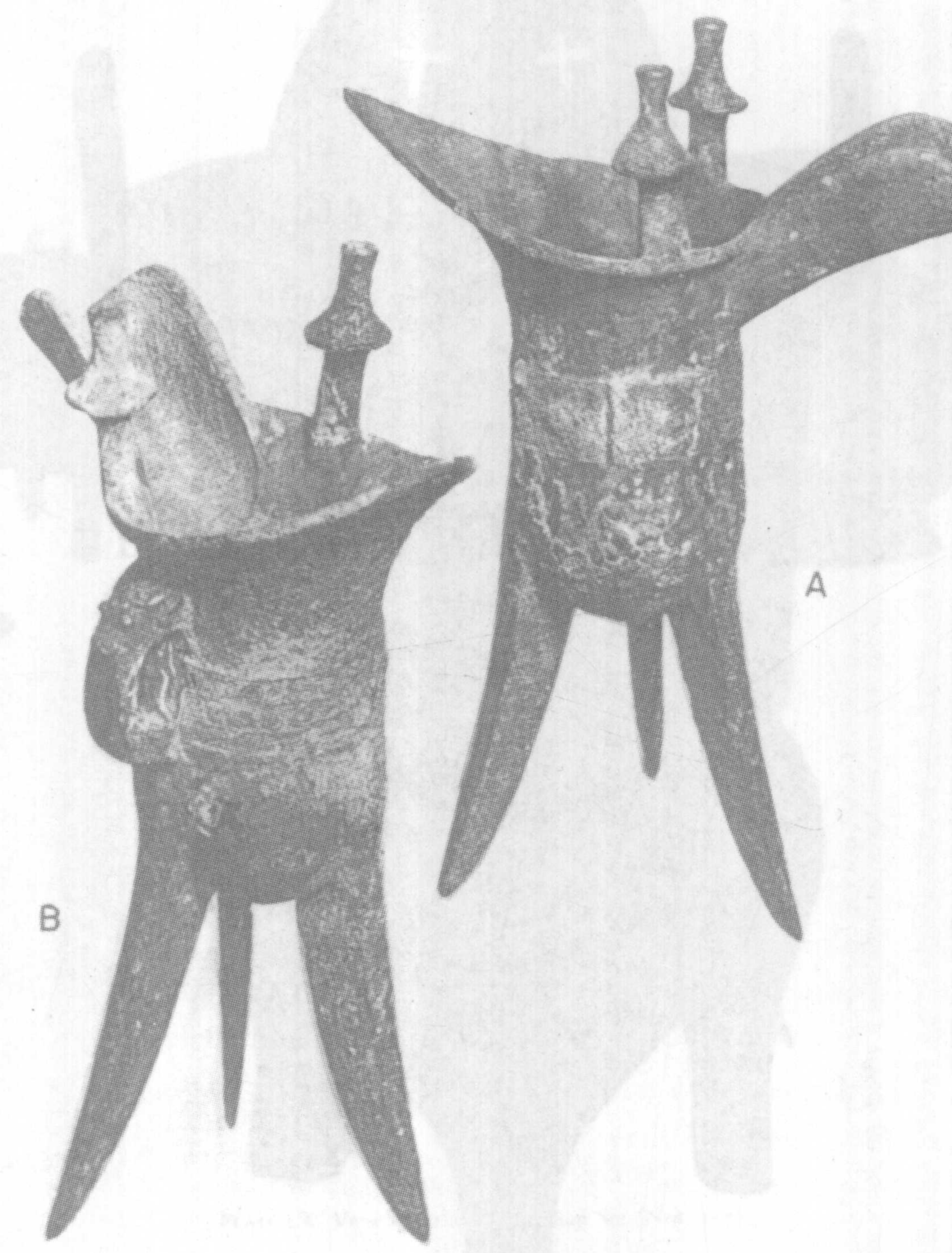


Plate LXVIII. Pair of libation cups of the Chüeh type (NB.2667.2668; p. 120)



Plate LXIX. Laver of the P'an type (NB.2671; p. 121)



Plate LXX. Food vessel of the Kuei type (NB.2672; p. 121)

GROUP VI

THE CH'EN-CH'EN SET

Early Chou. Ch'eng Wang Period, 1115–1077 B.C. Loyang, Honan

THE ROYAL ONTARIO MUSEUM has four vessels which belong to the well-known Ch'en-Ch'en group. It is said that there are now about one hundred items of this group in various collections in Japan, China, the American continent, and Europe. It is assumed that they are items of different branches of a composite group more or less associated with one central personage. The date is still under question, but one group of experts strongly advocates the period of Ch'eng Wang (1115–1077 B.C.) of the Chou dynasty; and the location is said to be the Loyang area of Western Honan.

A few of the items have quite long inscriptions incised on them, one of the most important being that of the square Yi vessel in the Freer Gallery of Art at Washington. That inscription records matters concerning the Duke of Chou, of his son Ming-Pao, and of the King, but does not mention the name of the king. The data on this vessel are fully set forth in a publication of the Freer Gallery.[1]

From the information available, and from a direct knowledge of Loyang over a period of years, the writer is convinced that the Ch'en-Ch'en vessels came from an area in the Mang Mountains, about four miles northeast of the city of Loyang. Two villages have been frequently reported as the source of these vessels, one is Ma-p'o (Horse Cliff) and the other Miao-kou (Temple Moat)—sometimes called Ma-kou (Horse Pit). These villages or hamlets are not far apart, and the locality is well known for the numbers of bronzes that have been excavated there. As previously noted the Mang Shan set (Group V) came to light at Ma-kou. (See Map C, Appendix H.)

In January 1929, a vessel of the type called Yu, or T'i-liang-yu, was brought to us; it was said to have come from Ma-p'o. It was tall, about 14 inches high, bottle-shaped, with a cover, and a long loop handle of a pail-handle type. Unfortunately, the vessel had been broken into a score of fragments, and these had been roughly soldered together so that it was not acceptable.

The lid of the vessel, however, carried an inscription which at that time was unfamiliar to the writer, but which in time was known to be a Ch'en-Ch'en inscription. At any rate a

[1]Oriental Studies, No. 3: *Chinese Bronzes* (Freer Gallery of Art, Washington, 1946), pp. 42–46.

tracing—not a rubbing—of the inscription was taken at the time, and this is included in the list of pictographs, with the graphs of the other four objects of this group. This vessel and inscription are illustrated in a Chinese book published in Peiping in 1936.[2]

These vessels were not obtained in one lot but over a space of months, mostly in 1932, and all of them had suffered breaks which required restorations.

OBJECTS IN THE CH'EN-CH'EN SET

1 NB.4108 P'AN Large shallow laver — PLATE LXXI

This vessel has a high base-rim, but no handles. It has animal decoration in three bands, of three pairs of profile dragons each, under the rim, around the body, and around the foot-rim. The inscription is inside on the centre bottom.
Ht. 4.5″; Dia. at rim 13.5″, at base 8.75″. Graph Chart VI-1

2 NB.4107 KUEI Food vessel — PLATE LXXII

This has a high cylindrical foot-rim, with an intricate incised animal design. Below the mouth-rim is a decorative band with circular raised bosses carrying a five-comma design, and with a central boss on each side of the animal-mask design. On the side of the bowl there are two vertical handles of animal mask and pendent tongue. The pictograph is on the inside bottom.
Ht. 5.2″; Dia. at mouth 7.5″, at base 6″. Graph Chart VI-3

3 NB.4109 HO Wine pot — PLATE LXXIII

This is shaped like a teapot and sometimes called a wine-mixer. It has three bulbous legs for quick heating of wine over a fire and a short tubular spout. Its cover was originally attached to the vessel by chain links. The single vertical handle has an animal head, and a band of scroll decoration encircles the neck. The inscription is in the interior of the lid.
Ht. 7.5″; Dia. body 5.75″. Graph Chart VI-2

4 NB.3226 TING Tripod food cauldron — PLATE LXXIV

This vessel has three cylindrical legs, one of which was broken and has been restored. It has a clearly incised design with animal masks, and two upright loop handles spring from the rim. The inscription of five characters is cast on the interior of the vessel.
Ht. 9.25″; Dia. at mouth 9.75″. Graph Chart VI-4

5 (Supplementary) YU Wine pail

This vessel was brought to me in Kaifeng. It was a tall bottle-shaped wine pail, which had a cover and a slender swing handle. Although the vessel was badly broken, the inscription inside the cover was intact.
Ht. about 14″. Graph Chart VI-5

[2] Shang Ch'eng-tso: *Shih Erh Chia Chi Chin T'u Lu* (Peiping, 1936), vol. 2, Tsun 16.

6 NB.4105 Finial

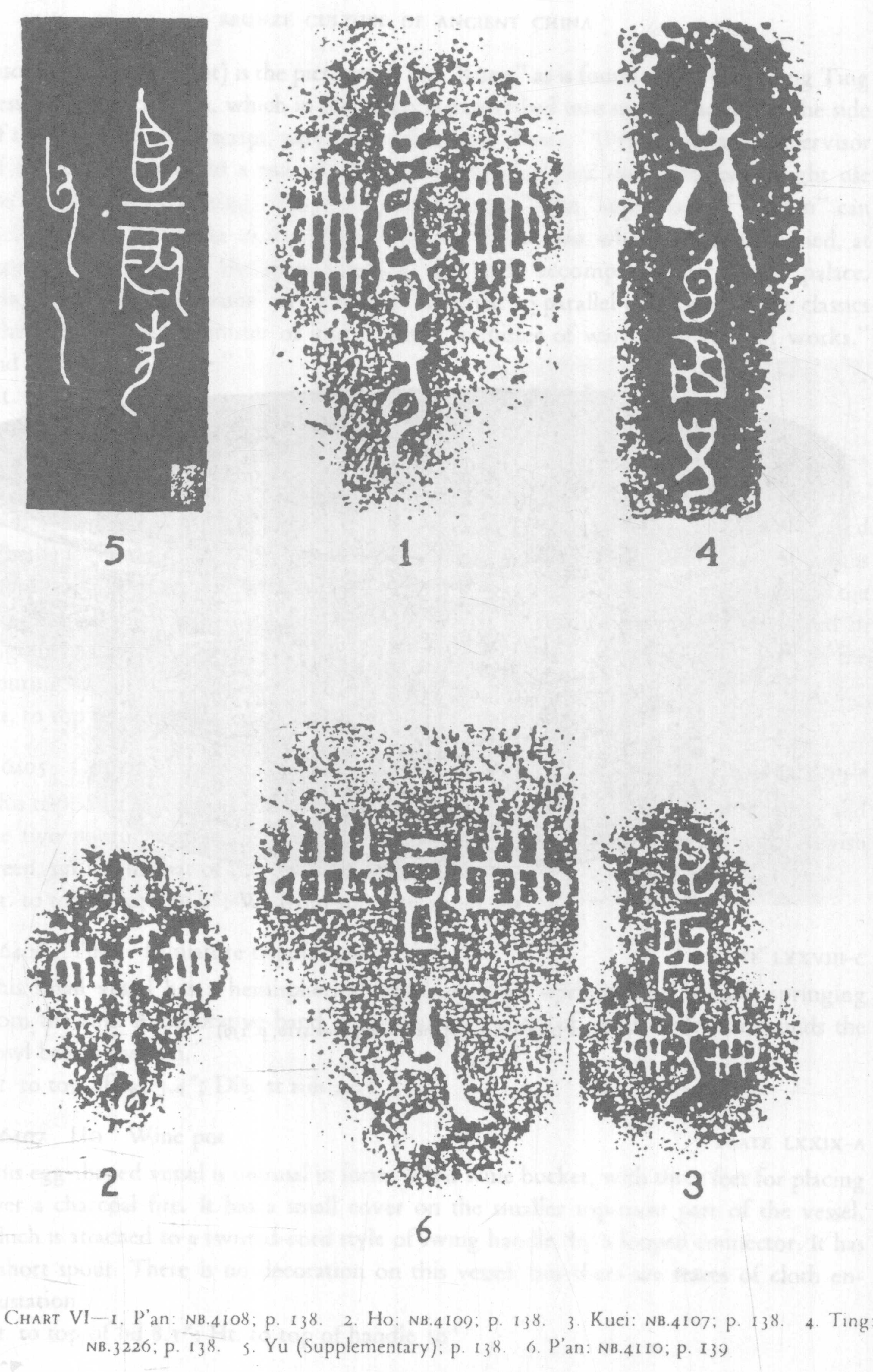
This finial which has the shape of a bird is actually a tubular socket, perforated on both sides for hafting; a large curling crest covers all the top of the head.
L. 3.15″

7 NB.4106 Finial

This object forms a pair with NB.4105 above and is similar in all respects. These two bronze finials as well as the following laver (NB.4110) were said to have come from the site of the Ma-p'o excavations, and are now in the Museum collection.

8 NB.4110 P'AN Ceremonial laver — PLATE LXXV

This vessel probably did not belong to the Ch'en-Ch'en set, but is given here because of the double bamboo graph, and the fact that it came from Ma-p'o whence the Ch'en-Ch'en set came. This laver has a high foot-rim and a shallow bowl with projecting convex rim. A band of decoration encircles the foot-rim and also the body, with conventional cicadas in low relief, placed horizontally on an incised scroll background, between narrow borders of small raised rims. The design is divided in three by vertical bars on the foot-rim, and by raised animal masks on the bowl. The inscription is in the centre of the bowl inside, and is the pictograph of two bamboo books with a stylized pedestal object between them and with the characters for Fu-Ting (Father Ting) below.
Ht. 4″; Dia. 11.75″. Graph Chart VI-6



GRAPH CHART VI—1. P'an: NB.4108; p. 138. 2. Ho: NB.4109; p. 138. 3. Kuei: NB.4107; p. 138. 4. Ting: NB.3226; p. 138. 5. Yu (Supplementary); p. 138. 6. P'an: NB.4110; p. 139



PLATE LXXI. Laver of the P'an type (NB.4108; p. 138)



PLATE LXXIII. Wine pot of the Ho type (NB.4109; p. 138)

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PLATE LXXII. Food vessel of the Kuei type (NB.4107; p. 138)

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PLATE LXXV. Laver of the P'an type (NB.4110; p. 139)

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PLATE LXXIV. Food cauldron of the Ting type (NB.3226; p. 138)

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GROUP VII

THE PRINCE KUNG OF SUNG SET

Early Chou, *c.* 1100 B.C. Hui Hsien, Honan

DURING THE JAPANESE INVASION of China (1937–1945) no archaeological material was obtainable from China, except that which went to Japan as spoils of war, and this was, of course, not available to the West. Following the end of the Japanese war in August 1945, there was a period of great disorder which continued for some years, so that very little archaeological research was carried on. However, in 1946–47 there was a little place in Northern Honan, a sort of quiet backwater, which was untouched by the ebb and flow of civil war and ideological conflict. It was in the Hui Hsien area (lat. 35° 30', long. 114°) at a village called Tung-shih-ho Ts'un or "Eastern Stone River Village." This is in territory that in Early Chou was the appanage of Marquis K'ang, a younger brother of Wu Wang, the first ruler of the Chou dynasty, who reigned 1122–1116 B.C. This particular area had also been an earldom of the Kung clan in the early Chou period. Tung-shih-ho village is 20 miles south of Hsün Hsien, which itself is 25 miles south of Anyang. All this country in Honan north of the Yellow River is well known for its remarkable archaeological riches and for the light it has thrown on the earlier ages of Chinese civilization. (Appendix H, Map A.)

During 1946 some very interesting early bronzes appeared in Kaifeng, and it was learned that they had been brought through the troubled area surrounding Tung-shih-ho village, and that white moulded pottery and carved ivory and bone had also appeared with the bronzes. Ink-rubbings of a piece of white pottery and of a piece of carved bone from that village were given to us (Plate LXXXIII), as well as a photograph of part of a group of bronzes and white jade animal figures (Plate LXXXII).[1] These latter objects had already been sent to Shanghai, but other vessels were forthcoming, and ultimately ten of the objects came into the possession of the Royal Ontario Museum in Toronto.

These vessels are important for five reasons:

(1) Some are of slightly different form from the known bronzes of this particular period (the beginning of the eleventh century B.C.), namely, Nos. 6, 7, and 8, of the Ho, Chüeh, and Hu types.

[1]The white jade figurines and the square Ting came into the possession of Messrs. C. T. Loo. The Ting was found to have an inscription corresponding to that on the wine beaker of the Ku Type (N.B. 6403).

(2) The cast sunken inscription on the large Ting (Nos. 1 and 1a) shows an affinity with the Shang bone script, while the inscription on the Ku (No. 2) includes both bone script and early bronze script characters. That on the Ting is the pictograph for Kung, with "son" or "prince" above it.

(3) Types of bronzes similar to Nos. 3, 4, and 10 are found in Chinese collections, though not frequently, but hitherto there has been no definite information as to provenance or period.

(4) The finding of these bronzes in this locality, and in the same excavation, together with the two inscriptions on Nos. 1 and 2, would suggest that these vessels belong to the Early Chou period—that is, in Early Chou but of Shang tradition—and date approximately from the eleventh century B.C.

(5) Although the bronzes come from the same excavation, they appear to be of three different groups. The first group comprises Nos. 1 and 2;[2] the second Nos. 3, 4, and 5, with possibly No. 10; and the third group Nos. 6, 7, 8, and 9. The patination of all the vessels is very similar, but the design and form are different. Those of the third group are most impressive in their simple dignity. The only inscriptions found are on Nos. 1 and 2 and on the supplementary square Ting of Plate LXXXII, page 157.

This Kung set of vessels was published with illustrations in the *Illustrated London News* of December 20, 1947, pp. 700–701.

OBJECTS IN THE PRINCE KUNG OF SUNG SET

1 NB.6402 TING Large tripod food cauldron PLATE LXXVI

The inscription inside the rim has the pictograph for "son," and an S-shaped dragon supported by two hands. These pictographs are found in the Shang Oracle Bone script. The former pictograph may also be translated "prince" in the sense of "heir-apparent." The second is the clan name "Kung." The whole inscription can be read as "Prince Kung." The deeper parts of the design had been filled in with a brownish paste, much of which still remains. This may be a mixture of lime and pig blood which is said to have been used in early China as an inlay similar to lacquer.

Ht. over all 18.5"; W. at ears 14"; Weight 42 lbs. Graph Chart VII-A

2 NB.6403 KU Slender wine beaker PLATE LXXVII

This slender libation vessel is of the usual three-zone type of Ku. It has an unusually long inscription inside the foot-rim, being a literary composition of twelve characters of early Chou script with an historical connotation. The first of the characters in the

[2]The square Ting also belongs to this first group, and its inscription becomes the third of the group (Plate LXXXII).

inscription (upper right) is the pictograph for "Kung" as is found on the preceding Ting vessel. This inscription, which in the graph is transcribed into modern script by the side of the original archaic script, may be translated as follows: "[Prince] Kung's Supervisor of the women received a reward of money [cowries] that the Supervisor might use for the purpose of making a Fu-yi ceremonial vessel." The "supervisor of women" can well be called "minister of the harem," for we know that when a prince married, at least eight women of the same family as the bride accompanied her to the palace. Also the use of "supervisor" or "minister" is similar to parallel uses found in the classics when speaking of "minister of instruction," "minister of war," "minister of works," and "minister of crime."

Ht. 11.2"; Dia. at top-rim 5.5". Graph Chart VII-B

3 NB.6404 CHIA Wine container PLATE LXXVIII-A

This tripod vessel, used for the heating of wine or other liquids, is of exquisite proportion, and the deeply incised design around the bowl is very effective. It will be noticed that the legs are similar in form to those of the Ho vessel (No. 6) in this list. The knobs and upright posts of the Chia vessel have never been satisfactorily explained. Perhaps the fact that the one handle on the side of this vessel is exactly opposite the posts and in alignment with two of the feet of the vessel might suggest a function in regard to the pouring out of the heated wine.

Ht. to top of knob, 9.2"; Dia. at rim 5.5"

4 NB.6405 CHÜEH Libation cup PLATE LXXVIII-B

This tripod has a vertical handle on the right side, the usual two posts on the rim, and the two pouring spouts. The patination is of a golden brown splashed with greyish green, similar to that of the previous vessel, NB.6404.

Ht. to top of knob 9.2"; W. from spout to spout 5.7"

5 NB.6406 TING Miniature tripod bowl PLATE LXXVIII-C

This small vessel has a hemispherical bowl and two upright loop handles springing from the rim. A decorative band of spirals, with rows of small circles, surrounds the bowl below the rim.

Ht. to top of ear 3.4"; Dia. at rim 2.7"

6 NB.6407 HO Wine pot PLATE LXXIX-A

This egg-shaped vessel is unusual in form. It is a wine bucket, with three feet for placing over a charcoal fire. It has a small cover on the smaller top-most part of the vessel, which is attached to a twisted-cord style of swing handle, by a looped connector. It has a short spout. There is no decoration on this vessel, but there are traces of cloth encrustation.

Ht. to top of lid 8.3"; Ht. to top of handle 10"

7 NB.6408 CHÜEH Libation cup PLATE LXXIX-B

This small bronze libation cup is very distinctly helmet-shaped. It is a tripod, with the usual vertical handle on the side and the two spouts, but it has only one post and knob which bridges the trough-shaped spout. There is no decoration on this vessel.

Ht. to top of knob 5.8"

8 NB.6409 HU Covered wine bottle PLATE LXXX-A

This wine container has a lid with knob, but has no decoration except the three simple lines around the neck, and comma-shaped spirals on the knob of the cover. Accretions of cloth and straw woven material are spread over areas of the vessel.

Ht. over all 7"

9 NB.6410 KU Wine beaker PLATE LXXX-B

It is less slender than the usual type, but it has a semblance of the characteristic three zones. It has no decoration except simple lines.

Ht. 5.5"; Dia. at upper rim 4.2"

10 NB.6411 CHIA Wine container PLATE LXXXI

This vessel is of tripod form, with flat bottom, two knobs, and one vertical handle. It has a decorative band around the centre. The quality of material and workmanship of this vessel does not compare with the previous nine vessels.

Ht. 9.5"; Dia. at rim 6.2"

11 NB.6412 TOU Ladle PLATE LXXXI

This long-handled ceremonial ladle has a design of meanders and cicadas in low relief with black lacquer inlay.This ladle came with the objects grouped in the photograph reproduced on Plate LXXXII, p.157.

L. 12.5"



Plate LXXVI. Food cauldron of the Ting type (NB.6402; p. 147)



Graph Chart VII—A. Ting: NB.6402; p. 147. B. Ku: NB.6403; p. 147. (See also inscription from the square Ting, Plate LXXXII, p. 157)



Plate LXXVIII—A. Wine container of the Chia type (NB.6404; p. 148). B. Libation cup of the Chüeh type (NB.6405; p. 148). C. Miniature bowl of the Ting type (NB.6406; p. 148)



Plate LXXVII. Wine beaker of the Ku type, with inscription (NB.6403; p. 147)



PLATE LXXX A. Covered wine bottle of the Hu type (NB.6409; p. 149) B. Wine beaker of the Ku type (NB.6410; p. 149)

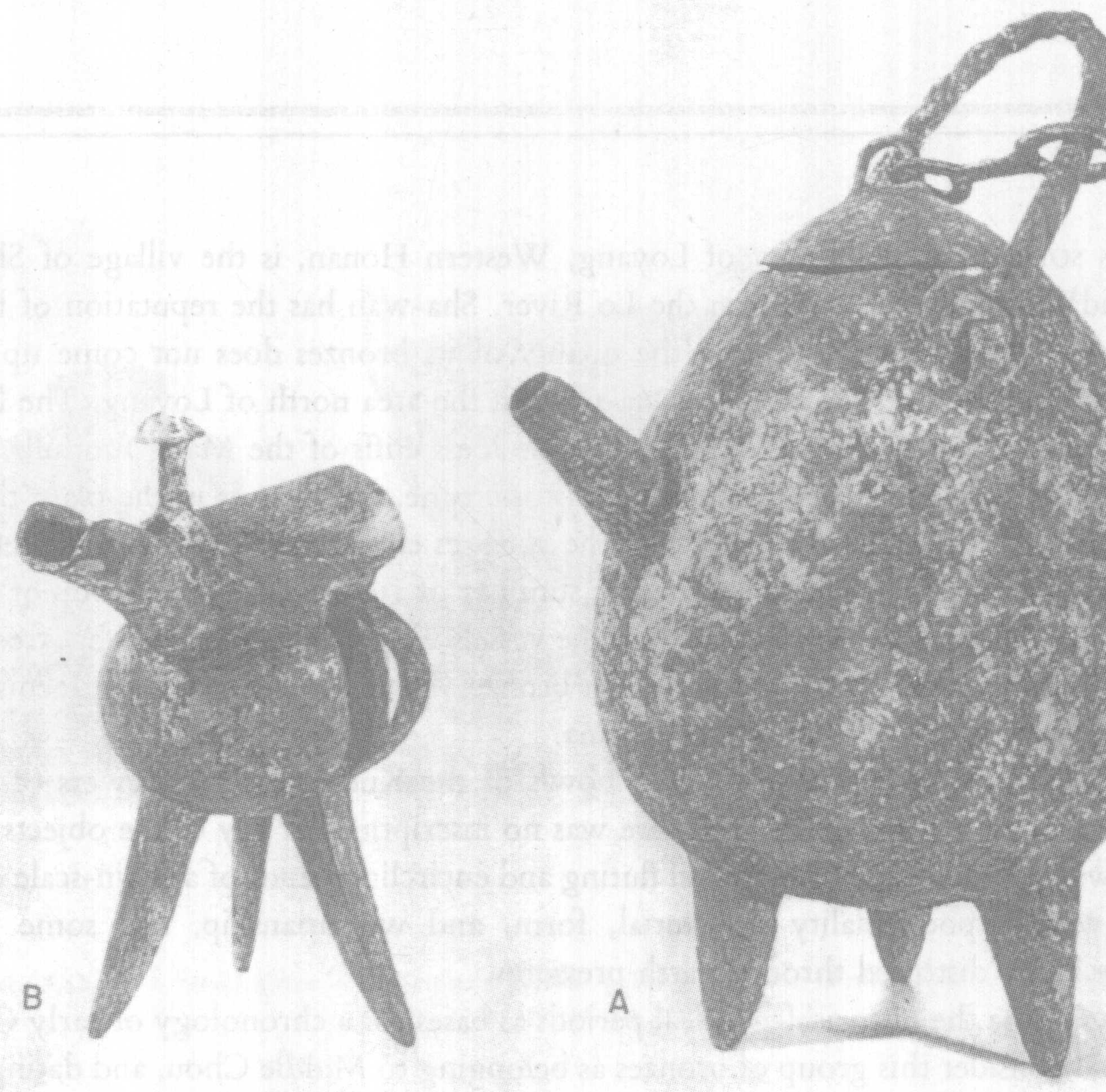


PLATE LXXIX A. Wine pot of the Ho type (NB.6407; p. 148). B. Libation cup of the Chüeh type (NB.6408; p. 149)



A B



龔司女鍚
商貝于司
作父乙彝

PLATE LXXXII. Group of objects from Hui Hsien, Honan (Supplementary), and inscription from the square Ting (A, pictograph; B, transcription)



PLATE LXXXI A. Wine container of the Chia type (NB.6411; p. 149). B. Ladle of the Tou type (NB.6412; p. 149)

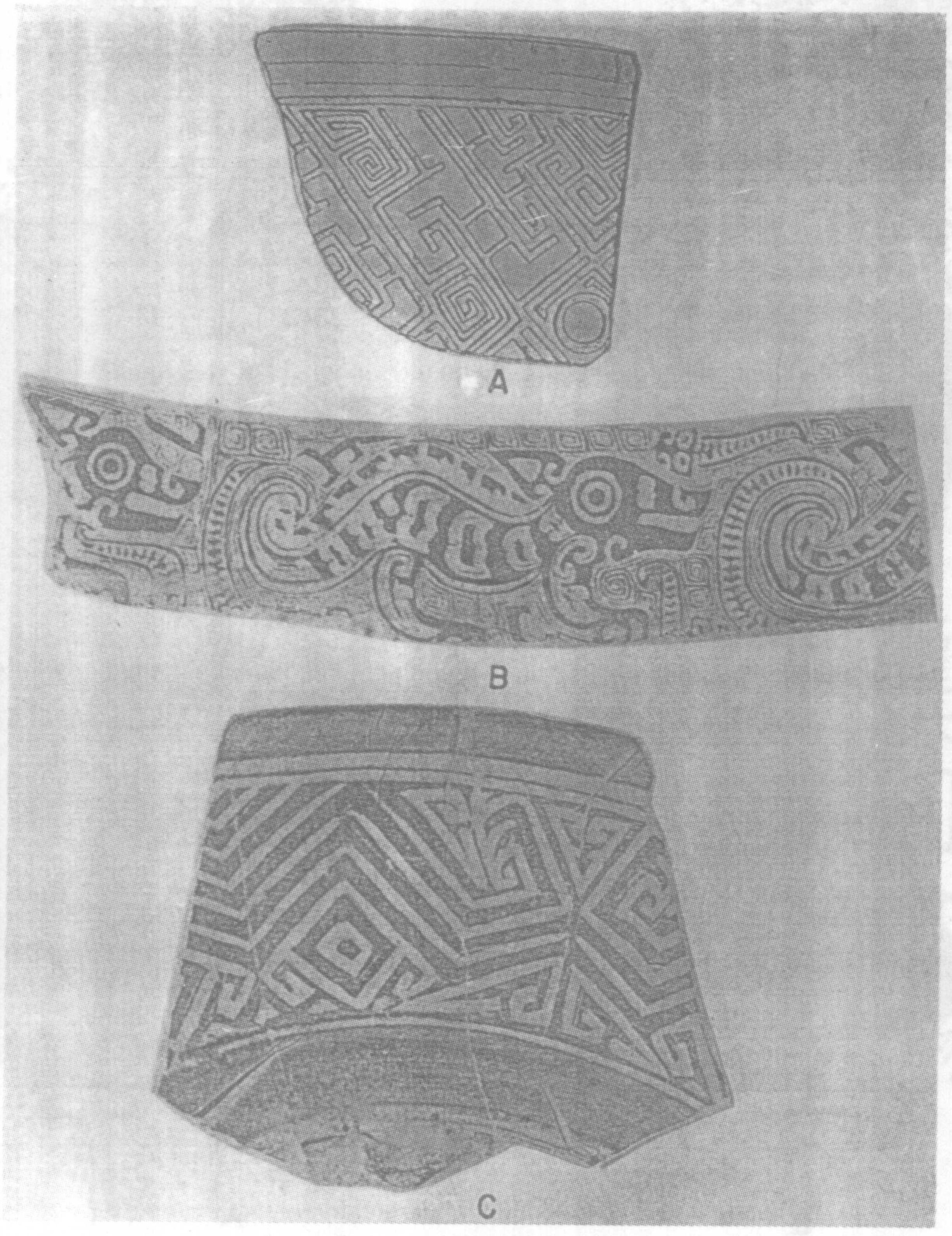


PLATE LXXXIII. Ink-rubbings of pottery (A,C) and bone (B) from Hui Hsien, Honan

GROUP VIII

THE SHA-WAN SET

End of Early Chou, *c.* 900–750 B.C. Loyang, Honan

THREE MILES SOUTHEAST of the city of Loyang, Western Honan, is the village of Sha-wan (Sandy Bend), located near a bend in the Lo River. Sha-wan has the reputation of being a fruitful source of ancient bronzes, but the quality of its bronzes does not come up to the standard of excellence of those found at Ma-p'o and the area north of Loyang. The latter is a loess soil district, full of caves dug out from the loess cliffs of the Mang foothills, which have been the habitations of people from prehistoric time. Sha-wan is in the plain through which the Lo River flows, and is subject to the changes characteristic of flood-ridden land. It was probably as a result of floods in the late summer of 1926 that a small group of bronze vessels came to light at Sha-wan. At any rate the vessels were clean and somewhat free of the encrustation usual on freshly excavated ancient bronze. Their patination was a greenish grey which the Chinese speak of as a "water" patina.

There were six items, a pair of covered bowls of the Kuei type, two ewers of the Yi class, a tripod Ting, and a P'an laver. There was no inscription on any of the objects. Their decoration was mainly in their horizontal fluting and encircling bands of a chain-scale design. The vessels were of poor quality in material, form, and workmanship, and some of the objects were badly distorted through earth pressures.

Students who use the historical-political periods as bases for a chronology of early Chinese culture would consider this group of bronzes as belonging to Middle Chou, and dating from about 771 B.C., when the Chou court moved from the Western capital of Feng to set up the new national capital of the Middle Kingdom at Loyang. This assumption is based somewhat on the sequence of the archaic script inscribed on the bronzes, but more particularly on the great changes in the types of the ceremonial bronzes and their form and décor. On the other hand other students who determine periods of early Chinese culture from the standpoint of art hold the opinion that Middle Chou should begin about 950 B.C. and extend to 771 B.C., but with the style running on to about 600 B.C. Since this is simply an archaeological study, with no attempt to deal with early Chinese art, the writer is content to consider the date of Group VIII as possibly the end of Early Chou, about 900–750 B.C.

The bronzes of this group, and of many others of similar form in the Museum collection,

show important differences from the Shang and Early Chou bronzes. The two Kuei bowls of this group have covers, and instead of a foot-rim only, there are rudimentary feet, which are not characteristic of the earlier bronzes. The fluting around the vessels is a new feature, and the bands of chain-scale décor are a new use of the scale symbol that is found on the zoomorphic designs of earlier date. The bulbous hollow legs of Shang and Early Chou have a functional use—the quick heating of liquid contents—but the bulbous legs of this later type are as a rule not hollow, but often merely half-legs with the clay cores bare and quite exposed. It may be said that these are Ming-ch'i funeral vessels; but the fact is that among the earlier vessels, few if any are of this type: in general they all seem to be of good quality, evidently intended for continuous use.

It would appear that many types of ceremonial vessels suddenly dropped out of sight and new vessels with other names came into use, such as the Fu, the Hsi, the Chou, the Chien, the Chiao, the Lu, the Lien, and many other types. Is it possible that changes in ceremonial practice account for this? If so, something drastic and revolutionary must have taken place to change so quickly what had been the custom for centuries. By the time of Middle Chou, had the Oracle Bone practices ceased to exist and the carved bone and the carved white pottery come to an end? Is it disuse of Shang ceremonies which accounts for dearth of Ku and Chüeh and Yu and Chia vessels? Scientific excavation of ancient sites and intensive search in ancient literature may in time shed light on these questions. It would be safe to surmise, however, that the intellectual, social, and political forces which established a remarkable feudal system in Western Chou would be quite sufficient to account for revolutionary changes in religious and social practices.

OBJECTS IN THE SHA-WAN SET

1 NB.2621 TING Food cauldron — PLATE LXXXIV-A

This vessel is hemispherical in shape, with three legs of horse-hoof form such as are common to Middle and Eastern Chou. Two vertical ears spring from the mouth-rim, and a band with chain-scale decoration encircles the bowl just below the rim. Three lines on the bottom form a triangle from leg to leg.
Ht. 9″; W. at rim 10″

2 NB.2624 P'AN Shallow laver — PLATE LXXXV-A

Laver of plate-like form attached to an extended foot-rim. Five lines, somewhat uneven, criss-cross along the bottom. Two loop handles spring from the side. It is decorated with two bands of chain-scale design, one encircling the bowl, the other on the foot-rim.
Ht. 3″; W. at rim 11.25″

3 NB.2622 KUEI Covered food bowl — PLATE LXXXIV-B

The bowl has an extended base-rim, with three very primitive feet attached, and two vertical loop handles on the sides, with animal-head decoration. It is concave, fluted horizontally, and has a band of chain-scale design. The cover has a cup-like knob at the top which forms a base when it is inverted and used as a container. Much distorted by earth crushing.
Ht. over all 7.5″; W. at rim 5.6″

4 NB.2623 KUEI Covered food bowl — PLATE LXXXIV-C

Similar to and forms a pair with NB.2622 above. Ht. to top of cover 7.5″; W. 5.6″

5 NB.2620 YI Ewer — PLATE LXXXV-B

This ewer is of sauce-boat shape with an animal-head handle at one end and spout of trough-like shape at the other end. What it was used for we do not know, but it might have been for libations of wine or water. There are parallel concave flutings around the bowl of the vessel, and under the rim is a band of incised (cast) chain-scale design similar to that on the Ting above (NB.2621).
Ht. 5″; W. 4″; L. 9″

6 NB.2625 YI Ewer — PLATE LXXXV-C

Similar to the ewer above (NB.2620), but it is smaller, and does not have the band of chain scale around the rim. Both this vessel and NB.2620 have four rather crude animal legs.
Ht. 2.75″; W. 3.2″; L. 5.25″



PLATE LXXXIV—A. Food cauldron of the Ting type (NB.2621; p. 160). B,C. Pair of covered food vessels of the Kuei type (NB.2622,2623; p. 161)



PLATE LXXXV A. Laver of the P'an type (NB 2624; p. 160). B,C. Ewers of the Yi type (NB.2620,2625; p. 161)

GROUP IX

THE MARQUIS K'ANG OF WEI SET

Early Chou. Ch'eng Wang Period, 1115–1077 B.C. Hsün Hsien, Honan

IN THE SPRING of 1931 ancient objects were excavated at Hsin Ts'un, a village near the railway station of Hsün Hsien. At once dealers from the port cities swarmed to the area, paying exorbitant prices for anything they could lay their hands on, and many objects were distributed throughout the countryside. The government then authorized competent scholars to undertake scientific excavation, which they began in the late summer of 1931. As a result, a large quantity of valuable material has been discovered, not all of which has yet been fully recorded and interpreted. Some of the objects carried the character for "marquis" (Hou), and it is generally accepted that they were of the period of Ch'eng Wang (1115–1077 B.C.). The "marquis" of the pictographs would probably be Marquis K'ang, an uncle of King Ch'eng, whose domain of Wei-hui included Hsün Hsien as well as Hui Hsien.

The Royal Ontario Museum from time to time acquired bronze objects said to have come from the Hsün Hsien excavations,[1] and the following have been selected as being most probably correct as to period and provenance. (See Appendix H, Map A.)

OBJECTS IN THE MARQUIS K'ANG OF WEI SET

1 NB.3153 K'UEI Helmet — PLATE LXXXVI

Many of these were found, not only in this area but at Anyang in connection with the Royal Tombs. There is a gash on one side of this helmet, which may have been caused by a blow from a socketed dagger-axe, but more likely by the pickaxe of an excavator. There is no decoration on the helmet, except a stout ring immovable at the top, which from ancient pictographs we may assume was used to carry a crest.
Ht. 7.9"; W. 7"

[1]In addition to the bronze items there have come from the Hsün Hsien excavations many cowries, mussel shell sections of animal masks, and carved bone fragments. See White: *Bone Culture of Ancient China* (University of Toronto Press, 1945). Plate LXXX and pp. 208 229.

2 NB.6420 TAO-KO Knife-halberd — PLATE LXXXVII-A

This knife-halberd is hooked at the top, and has slits parallel with the blade for lashing to a shaft.
L. 13"; Max. W. 4.75"

3 NB.6421 TAO-KO Knife-halberd — PLATE LXXXVII-B

Similar to NB.6420, but it has slight differences of shape. The knife-halberd is characteristic among Hsün Hsien weapons, and does not appear to have been used in Shang times.
L. 13.5"; Max. W. 5.25"

4 NB.6447-A, B, C Three strap terminals — PLATE LXXXIX

Each has a tongue. One has incised on it the pictograph of "cart," and the other two the character for "cease," but in this case it is probably a name character.
Approximately 2"×2.5"

5 NB.6449-A, B, C, D Four angle brackets — PLATE LXXXVIII

These are heavy well-made objects, each with a sacrificial animal head in high relief.
L. 5.5"; W. 4"; sq. socketed ends .75"

6 NB.3261 CH'I Halberd — PLATES XCA-1, XCB-1

This weapon is made of thin metal, and formed on graceful lines, with a dagger-axe blade on the side, and a hooked knife blade at the top end. It has no inscription.
L. 8.2"; W. 7.4"

7 NB.3154 CH'I Halberd — PLATES XCA-2, XCB-2

This halberd has two blades, one a lancehead type, the other a dagger-axe, hafted vertically along the staff. A pictograph incised on the butt probably means "family" or "house."
L. 8.9"; W. 7"

8 NB.3155 CH'I Halberd — PLATES XCA-3, XCB-3

This halberd carries two blades which are similar to those of NB.3154 above, but the tips of both blades are broken off. A pictograph incised on the butt, is of Hou or "marquis."
L. (restored) 10.5"; W. 6.7"

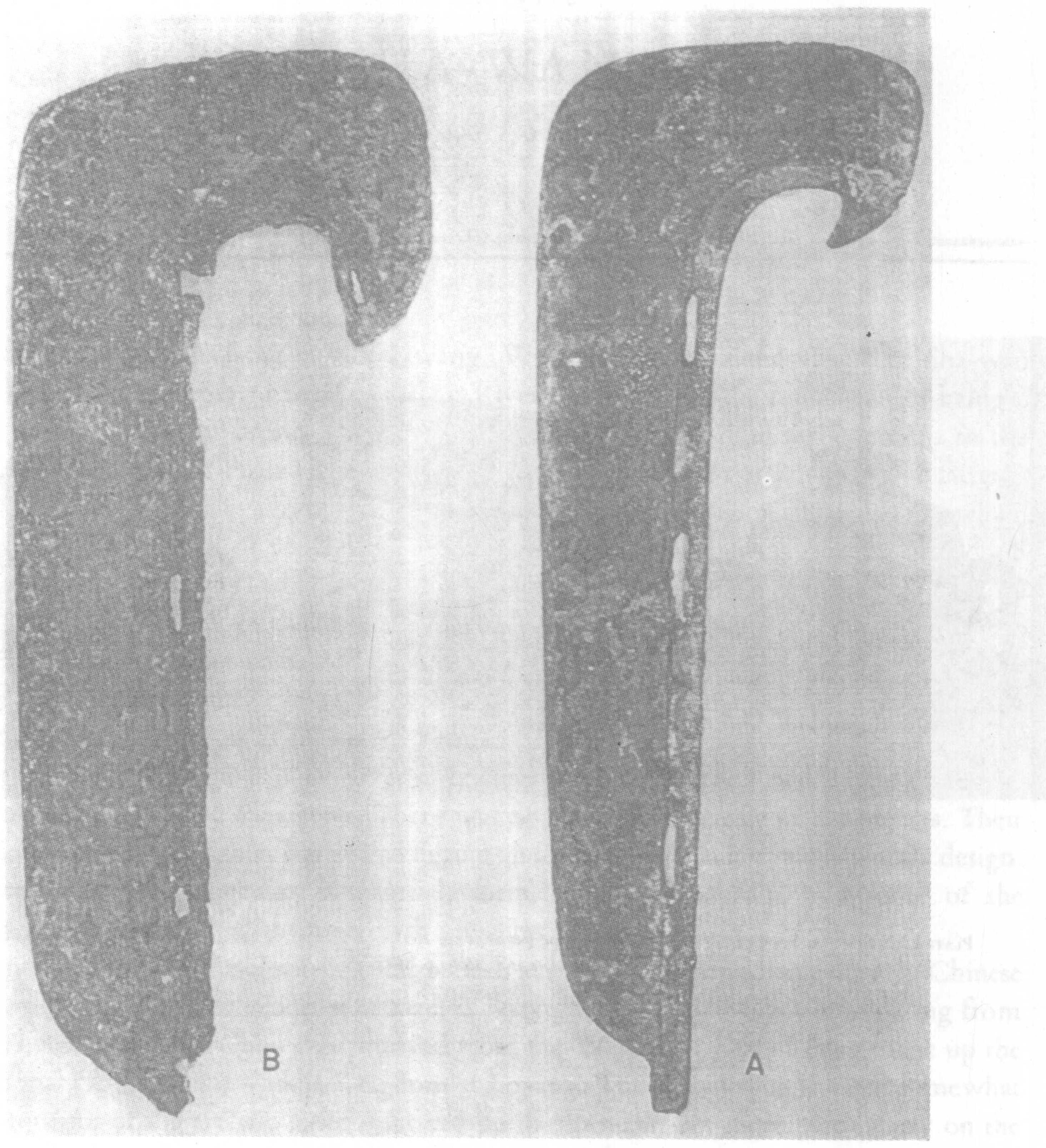


Plate LXXXVII. Knife-halberds (Tao-Ko) (NB.6420.6421; p. 165)



Plate LXXXVI. Helmet (K'uei) (NB.3153; p. 164)

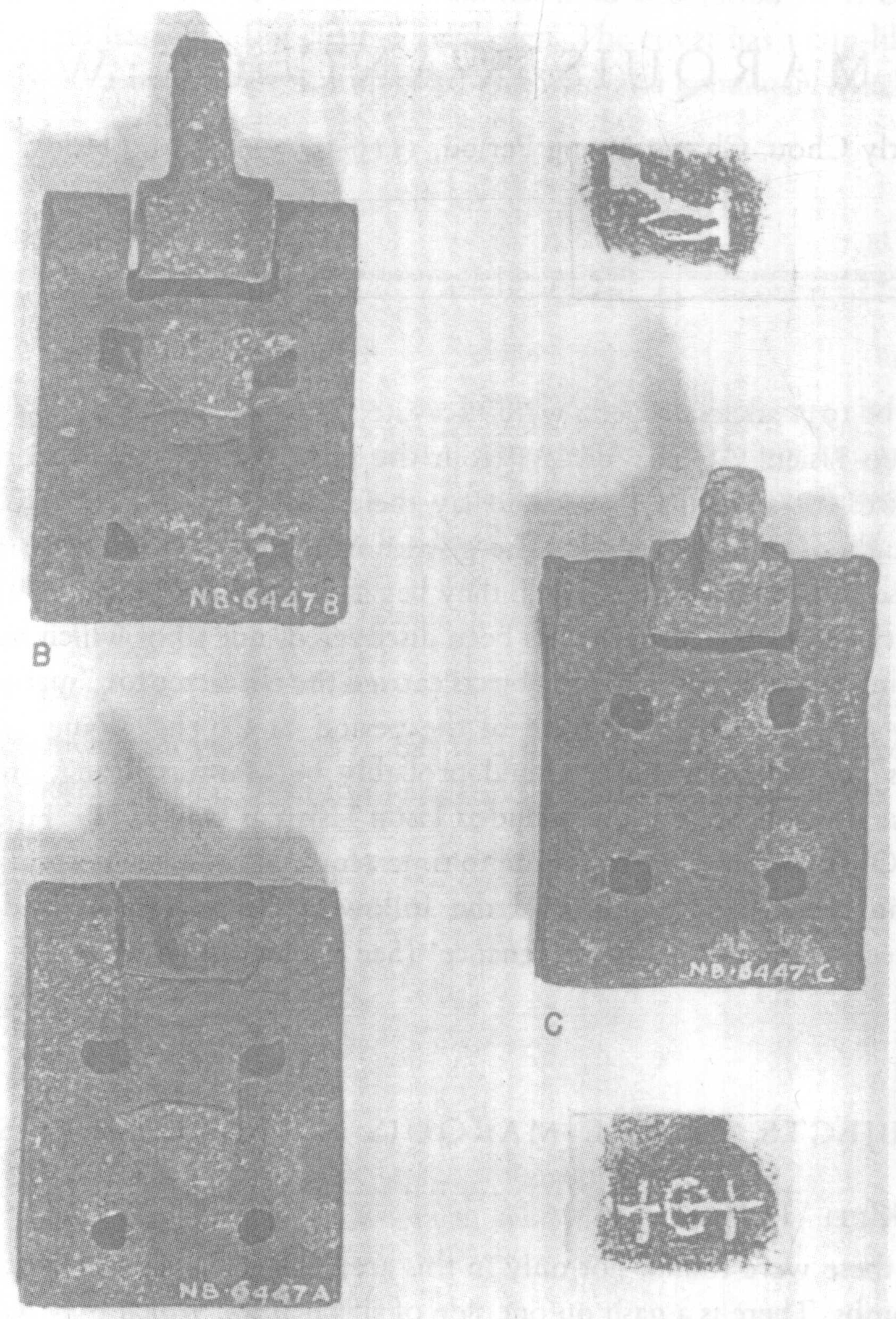


Plate LXXXIX. Strap terminals, with pictographs (NB.6447; p. 165)

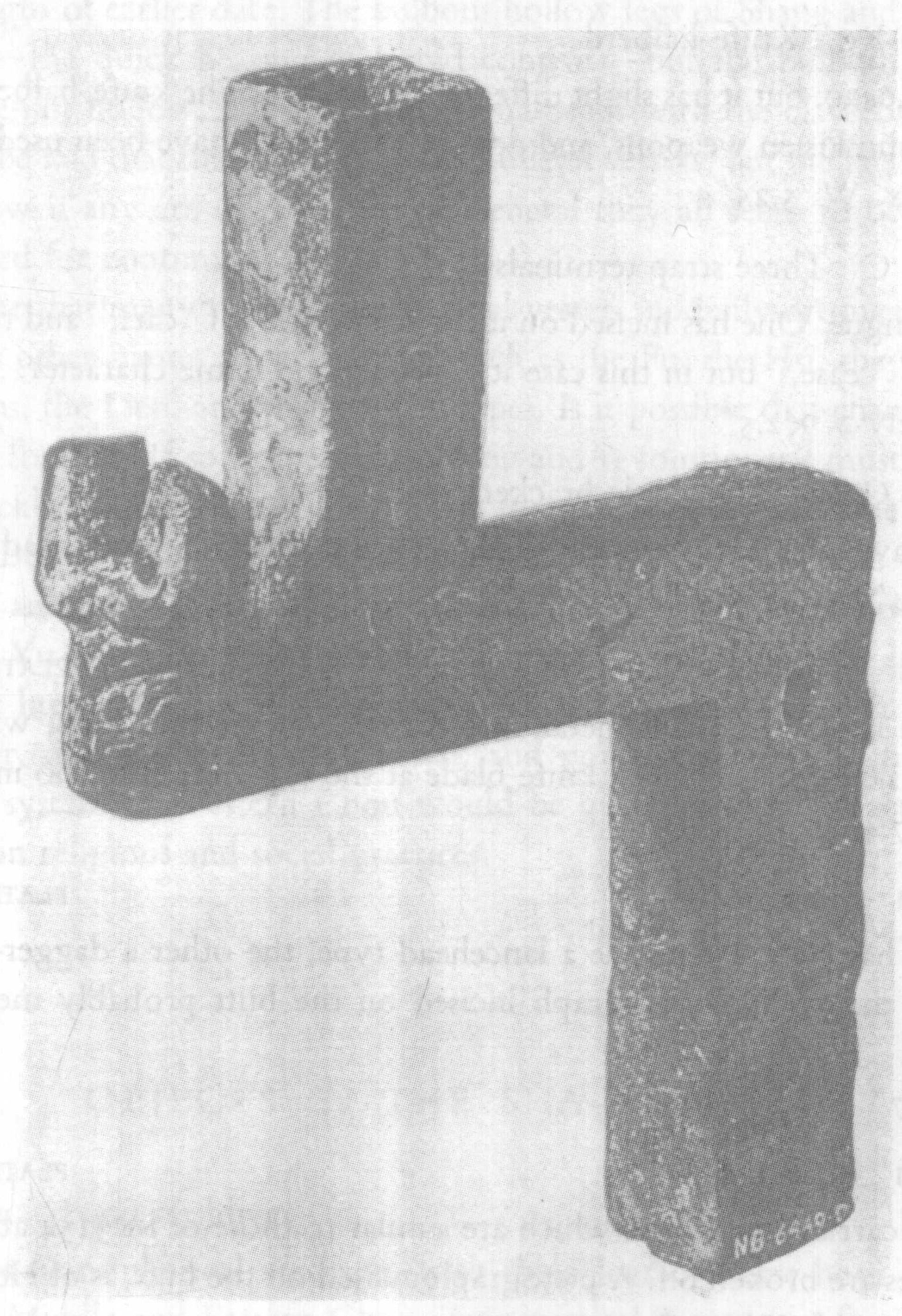


Plate LXXXVIII. Angle bracket (NB.6449; p. 165)

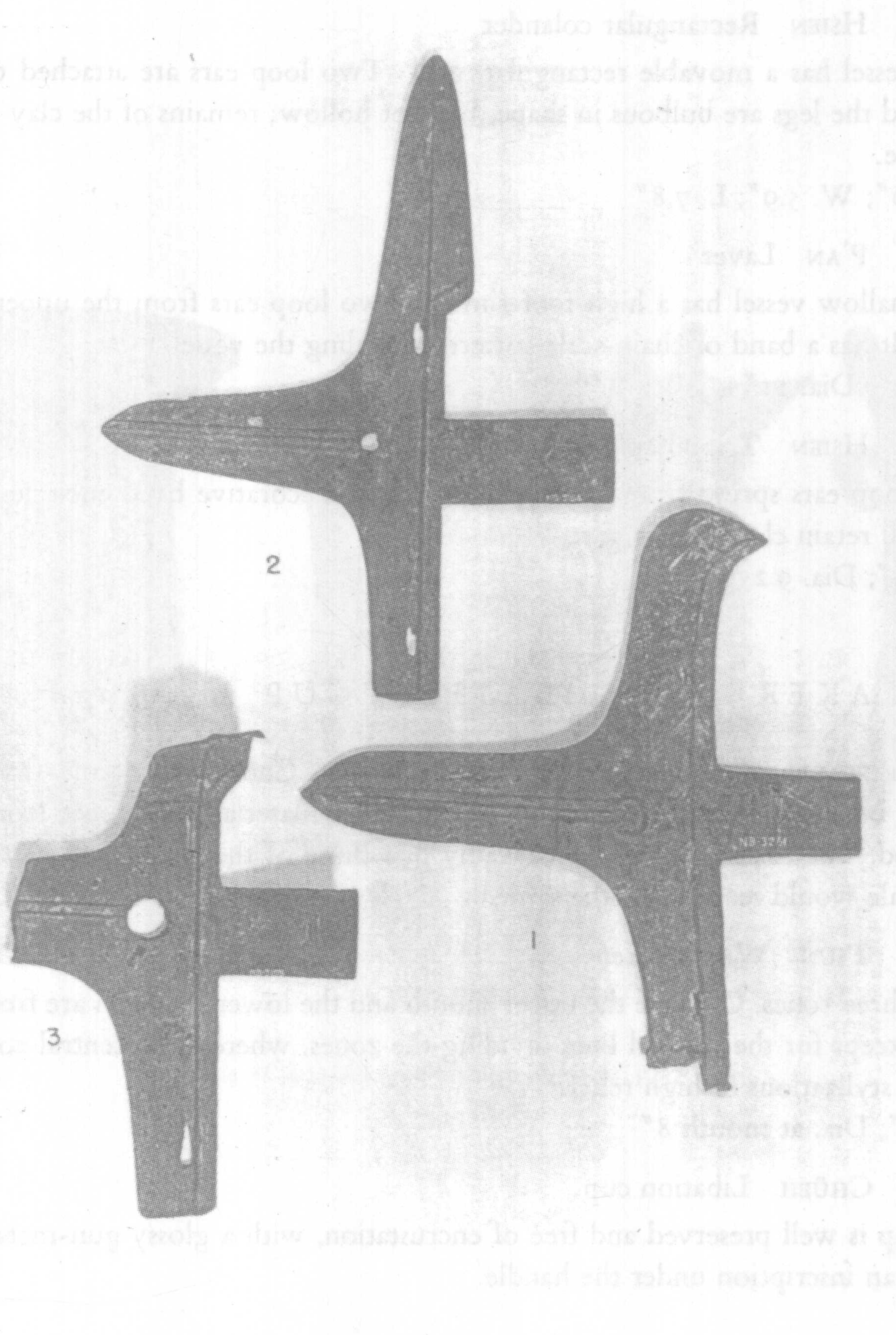


PLATE XCA. Halberds of the Ch'i type (NB.3261,3154,3155; p. 165)

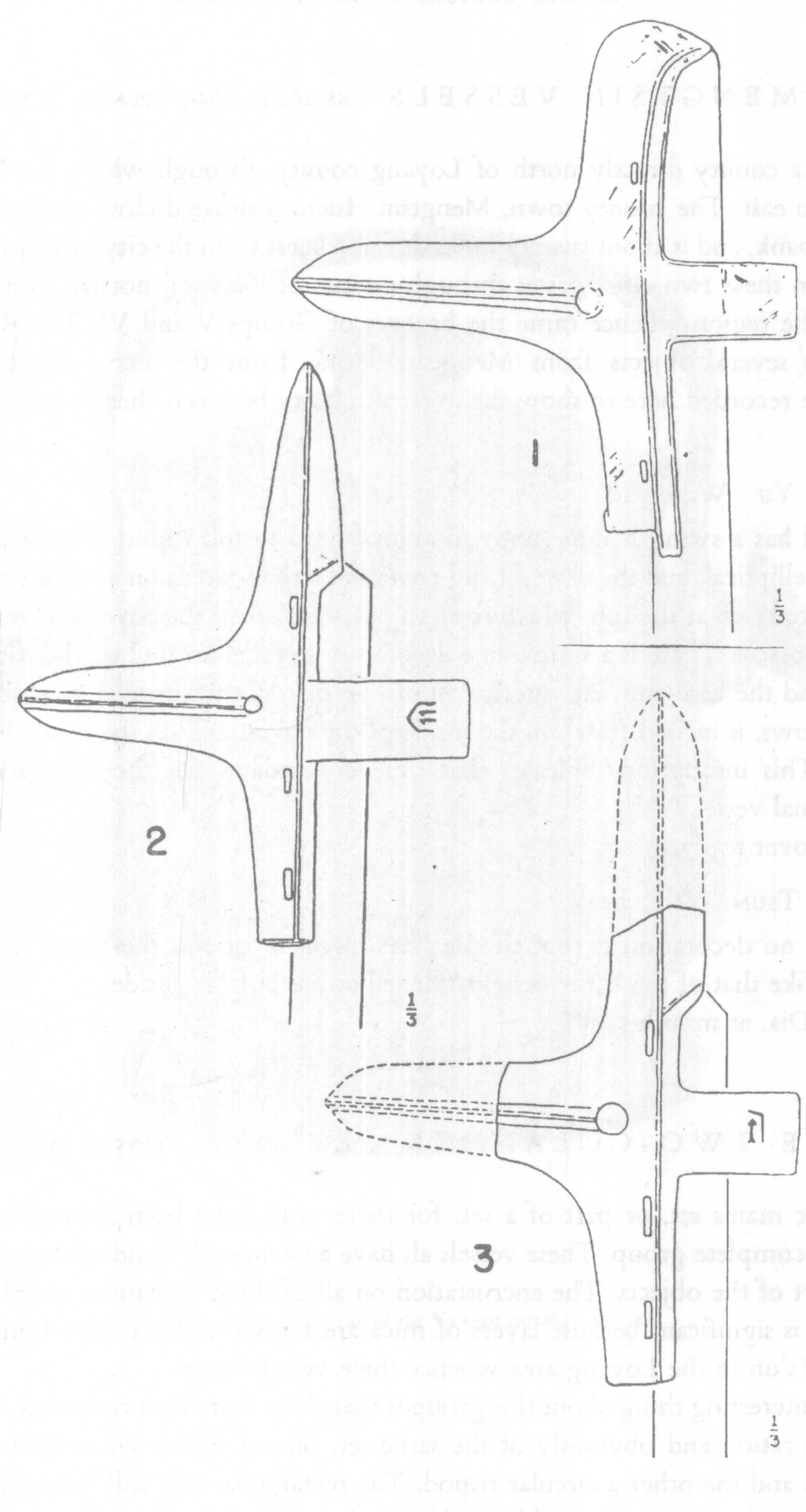


PLATE XCB. Line-drawings of halberds on Plate XCA (restored)

GROUP X

VARIOUS SMALL UNITS

MUCH OF THE INFORMATION concerning the bronzes in the Chinese Collection of the Royal Ontario Museum was acquired through residence in the province of Honan over a long period of time, and with the help of loyal Chinese friends. These friends were natives of Honan, who came from different parts of the province. The leader who co-ordinated their activities was an ardent Buddhist, whose family had been in the antique business for generations; he died during the Japanese invasion.

In addition to the nine groups of ceremonial objects already discussed, which in point of time range probably from about 1400 to 770 B.C., there are in the Museum collection a number of smaller units of from two to six or more objects also belonging to that early period, and a few of them are listed below. They too come from Honan, from Anyang, Hui Hsien, including Hsün Hsien, and Loyang. The small units which are included in this group are as follows:

(A) Three Inscribed Bells
(B) Four Simple Vessels
(C) Mengtsin Vessels
(D) The Two-Colander Set
(E) Beaker and Libation Cup
(F) A Pewter Set

(A) THREE INSCRIBED BELLS NB.6413-1, 2, 3 PLATE XCI

THESE BELLS are of the Nao type. They are socketed for wooden handles, and have no clapper, but are held in the one hand, with the mouth upward, and beaten by a knocker held in the other hand. Each of these bells carries a pictograph of a bird facing right, surmounted by a dagger-axe. This pictograph is carried by an important bronze of the Yu type now in the Freer Gallery of Art.[1]

[1]Oriental Studies, No. 3: *Chinese Bronzes* (Freer Gallery of Art, Washington, 1946), p. 37.

These bells were probably part of a set graded from small to large to produce a scale of notes. Sets of this kind dating from the Eastern Chou period (771–255 B.C.) are not uncommon, but these three are the only known graded bells from Shang times, except possibly the small Ling bells, of which there are many of various sizes in the Toronto collection. The difference between the size of the largest of these three bells and the two smaller would seem to require two bells of intermediate size to bridge the gap.[2]

These bells came direct to the writer from Anyang when he was resident at Kaifeng in December 1946. With them came also some grey pottery, including a bird's-head fragment of a vessel and a moulded clay figure of a water-buffalo about seven inches long. There were also a few pieces of jade, and a dagger-axe with the Tzu ("son" or "prince") character on it. L. 7.25″ (1), 5.75″ (2), 5″ (3)

(B) FOUR SIMPLE VESSELS NB.3238–3241 PLATE XCII

THESE FOUR SMALL VESSELS came from Anyang and are of the Shang period. They are unusually small for group vessels, and are crude in quality of bronze, in form, and in workmanship. They do indicate, however, that the poor and humble, as well as the wealthy and powerful, observed the ceremonies and offered the sacrifices. It has been suggested by some Westerners that Shang culture as we know it was confined to a very small stratum at the top of Shang society, and that the common people were kept in ignorance of the ceremonies and their meaning. This is not borne out by the evidence of these vessels. There are no inscriptions on them.

1 NB.3238 TSUN Wine beaker
Ht. 6.9″; Dia. 4.4″

2 NB.3239 CHIH Wine beaker
Ht. 4.4″; Dia. 2.6″

3 NB.3240 CHÜEH Libation cup
The legs are unusually short, and the bowl of the cup long. It has a small handle on the right side, the usual two spouts, and two small rough posts, without the usual caps.
Ht. 5.1″

4 NB.3241 CHÜEH Libation cup
This is almost identical with the latter vessel. Ht. 5.2″

[2]White: *Tombs of Old Loyang* (Shanghai, 1934), Sec. VI, pp. 161–166.

(C) MENGTSIN VESSELS NB.2628, 2629 PLATES XCIII, XCIV

MENGTSIN is a county directly north of Loyang county, through which the Yellow River flows west to east. The county town, Mengtsin Hsien, is situated close to the Yellow River on its south bank, and is about twenty miles due northeast from the city of Loyang. The main road between these two cities passes through ravines of loess soil not far from Ma-p'o and Miao-kou, the region whence came the bronzes of Groups V and VI. The Royal Ontario Museum has several objects from Mengtsin dating from the Early Chou period, but only two are recorded here to show the great similarity between these vessels and those of Mang Shan.

1 NB.2628 YU Wine pail PLATE XCIII

The pail has a swing handle, with an animal head in full round at each terminal. The vessel is elliptical, and the close-fitting cover has a spur extension at each small end, with a cup-like knob at the top, which forms a base-rim when the cover is inverted and used as a receptacle. There is a simple line decoration in relief around the lid, the neck of the bowl, and the base-rim. An inscription of five pictographs, similar to that on the Tsun that follows, is incised (cast) on the inside of the cover, and on the inside bottom of the vessel. This inscription indicates that "the descendants [of the Ancestor] made this ceremonial vessel."
Ht. to cover top 7.25″

2 NB.2629 TSUN Wine beaker PLATE XCIV

There is no decoration except simple lines in relief around the vessel. An inscription exactly like that of the latter vessel is incised at the bottom inside.
Ht. 8″; Dia. at mouth 7.25″

(D) THE TWO-COLANDER SET NB.3202, 3175, 3176 PLATE XCV

THIS IS a poor man's set, or part of a set, for there must have been several other types of vessels in the complete group. These vessels all have a chain-scale band of decoration around the upper part of the objects. The encrustation on all of them contains a sprinkling of mica flakes, which is significant because layers of mica are known to have been found in a tomb site at Chin Ts'un in the Loyang area whence these vessels came.

The most interesting thing about this group is that there were two colanders, both bearing the same decoration and obviously of the same set, one of which was a four-legged rectangular vessel and the other a circular tripod. The rectangular one still retained its movable grill inside, though two corners had been damaged, and the wonder is that the broken plate had not been thrown away. These vessels came from the Loyang area, and from their form

and décor could be placed not earlier than 772 B.C. (end of Early Chou). The vessels bear no inscription and are crude in every way.

1 NB.3202 HSIEN Rectangular colander

This vessel has a movable rectangular grill. Two loop ears are attached to the upper rim and the legs are bulbous in shape, but not hollow; remains of the clay core are still in place.
Ht. 8.6″; W. 5.9″; L. 7.8″

2 NB.3175 P'AN Laver

This shallow vessel has a high foot-rim and two loop ears from the upper side of the bowl. It has a band of chain-scale pattern encircling the vessel.
Ht. 2.5″; Dia. 11″

3 NB.3176 HSIEN Tripod colander

Two loop ears spring from the upper rim and a decorative band encircles it. Bulbous legs still retain clay core in part.
Ht. 8.6″; Dia. 9.25″

(E) BEAKER AND LIBATION CUP NB.2598, 2596 PLATE XCVI

THIS BRONZE BEAKER of Tsun type and libation cup of Chüeh type came from the same excavation, but with no information about associated material. They date from the Early Chou period. The libation cup is remarkably like those of the Mang Shan set (Group V) and the locale would seem to be the same.

1 NB.2598 TSUN Wine beaker

It has three zones. Of these the upper mouth and the lower foot-rim are free of decoration, except for the parallel lines dividing the zones, whereas the central zone is full of animal stylizations in high relief.
Ht. 10″; Dia. at mouth 8″

2 NB.2596 CHÜEH Libation cup

The cup is well preserved and free of encrustation, with a glossy gun-metal surface. It carries an inscription under the handle.
Ht. 9″

(F) A PEWTER SET PLATES XCVII-C

PEWTER CEREMONIAL VESSELS of ancient China are not common, so that the discovery of a group of pewter vessels similar to bronze vessels of that period, seems worth recording as an

interesting parallel, even though the vessels were not obtained by the Royal Ontario Museum, and their present whereabouts are unknown.

In December 1936 the Yamanaka Company of New York showed the writer a group of ten pewter vessels recently arrived from China, and furnished him with photographs of the vessels, that he might publish them when a suitable opportunity should occur. He was informed that their Chinese purchasers had obtained them in Cheng Chou, Honan, which means that in all probability their provenance was the Loyang area in Western Honan. Antiques from Western Honan invariably came to Cheng Chou, a busy junction city for the Kin-han and Lung-hai railways, where the buyers for the trade in antiques did much of their marketing, and from there the objects would be taken north to Peking, east to Shanghai, and in more limited quantities south to Hankow.

It was learned that a Hsien or colander was among the vessels but it was not clear where it had gone. One of the set, a Chüeh or libation cup, was obtained by the William Rockhill Nelson Gallery of Art, Kansas City, and by kind permission that vessel in included in this record.

From the shapes it would appear that the vessels are from two sets, and there must have been many more items in the original sets than these few. The vessels were in poor condition and much distorted, so that only traces of decoration were apparent; and no inscriptions were found on them except possibly on the Kansas City Chüeh, which seems to have the pictograph Fu-Ting (Father Ting) under the handle. The height of that vessel is 8.5″ and its length 6.75″. The most likely date for the group is Early Chou.

In part this group has been published (1953) in a Japanese journal,[1] but as far as is known no publication in English has yet been made. In this list no attempt will be made to describe the vessels, but only to give the type names of each object.

1 Yu—Pail with swing handle, Pl. XCVII
2 Yu—Pail with swing handle, Pl. XCVII
3 Tsun—Large wine container, Pl. XCVIII
4 Tsun—Large wine container, Pl. XCVIII
5 Chia—Wine heater with bulbous legs, Pl. XCVIII
6 Kuei—Food container, Pl. XCVII
7 Ku—Slender wine container, Pl. XCIX
8 Chüeh—Tripod libation cup, Pl. XCIX
9 Chüeh—Tripod libation cup, Pl. XCIX
10 Chüeh—Tripod libation cup, Pl. C

It is worth noting that the pewter Kuei of Plate XCVII is almost identical with the bronze Kuei of Plate LVI in form and size; and also that each of two Chüeh of the pewter set has a different style of cap to the upright posts, and this is paralleled in the bronze set of Group IV by two pairs of these cups with the different caps. (Cf. Plate LIV.)

[1] "Studies on the Anyang Bronze Culture." *Journal of Oriental Studies* (Kyoto), No. 23. March 1953.

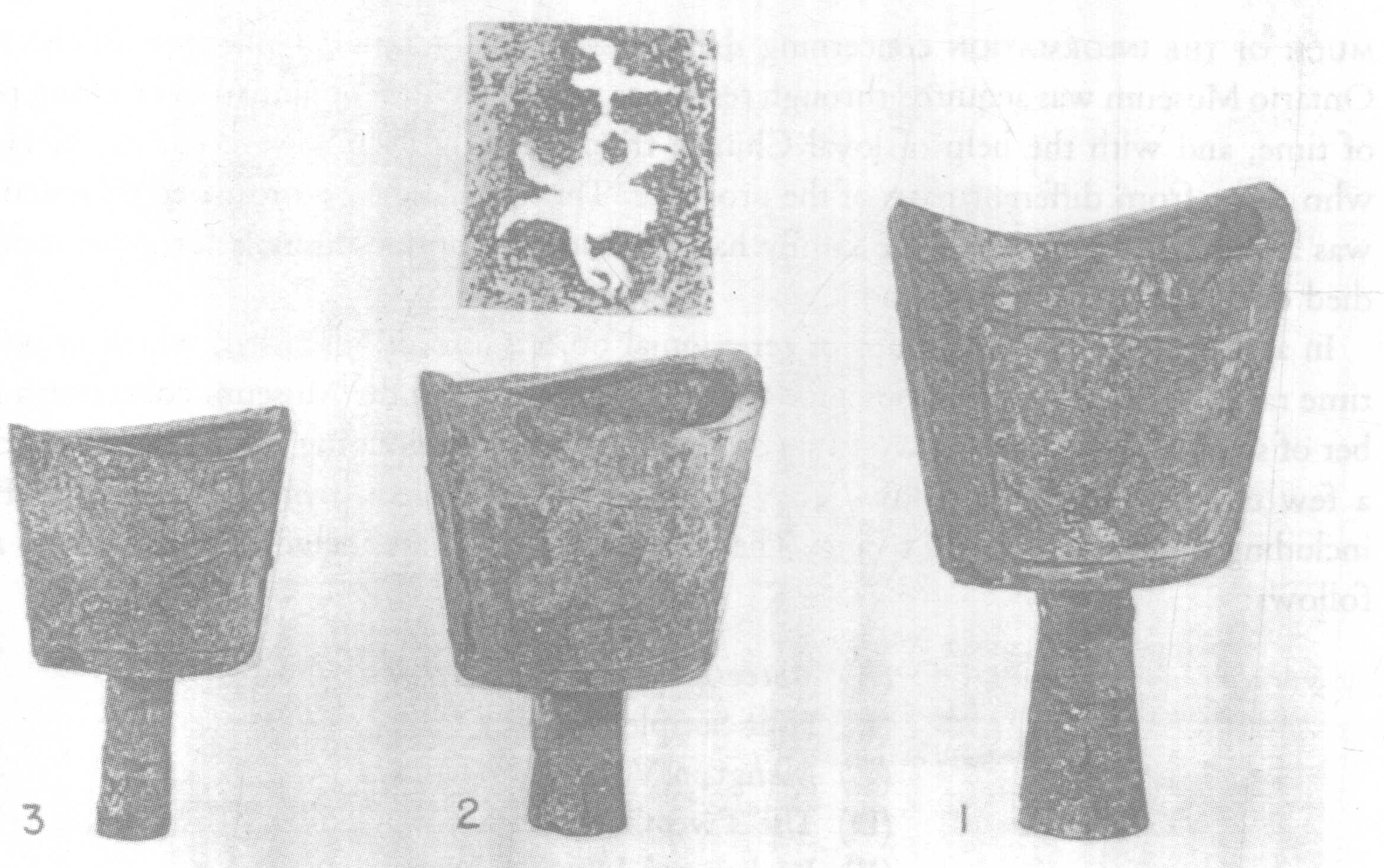


PLATE XCI. Three inscribed bells of the Nao type (NB.6413; p. 172)



PLATE XCIII. Wine pail of the Yu type (NB.2628; p. 174)

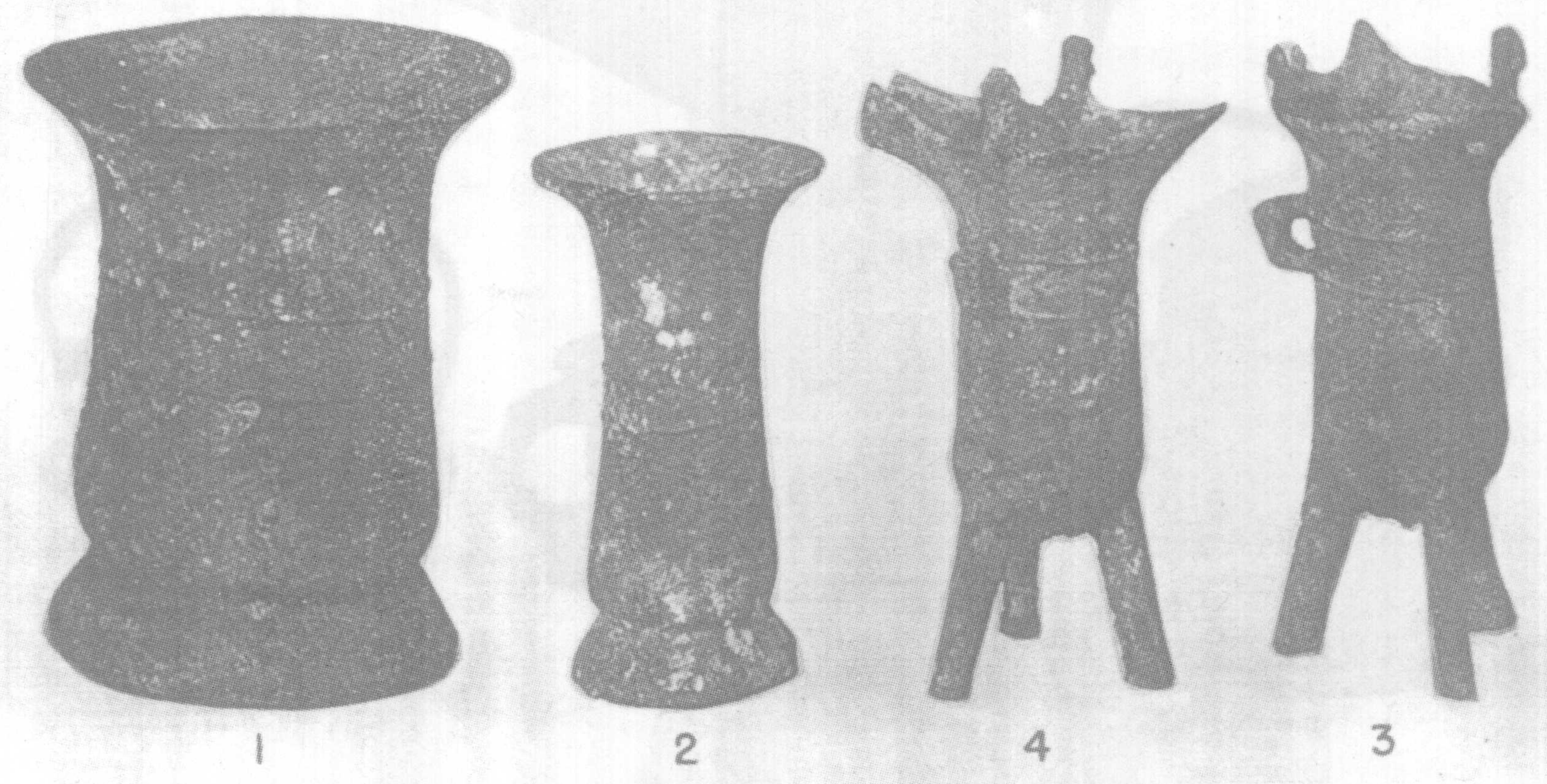


PLATE XCII. Four simple vessels (NB.3238–3241; p. 173)

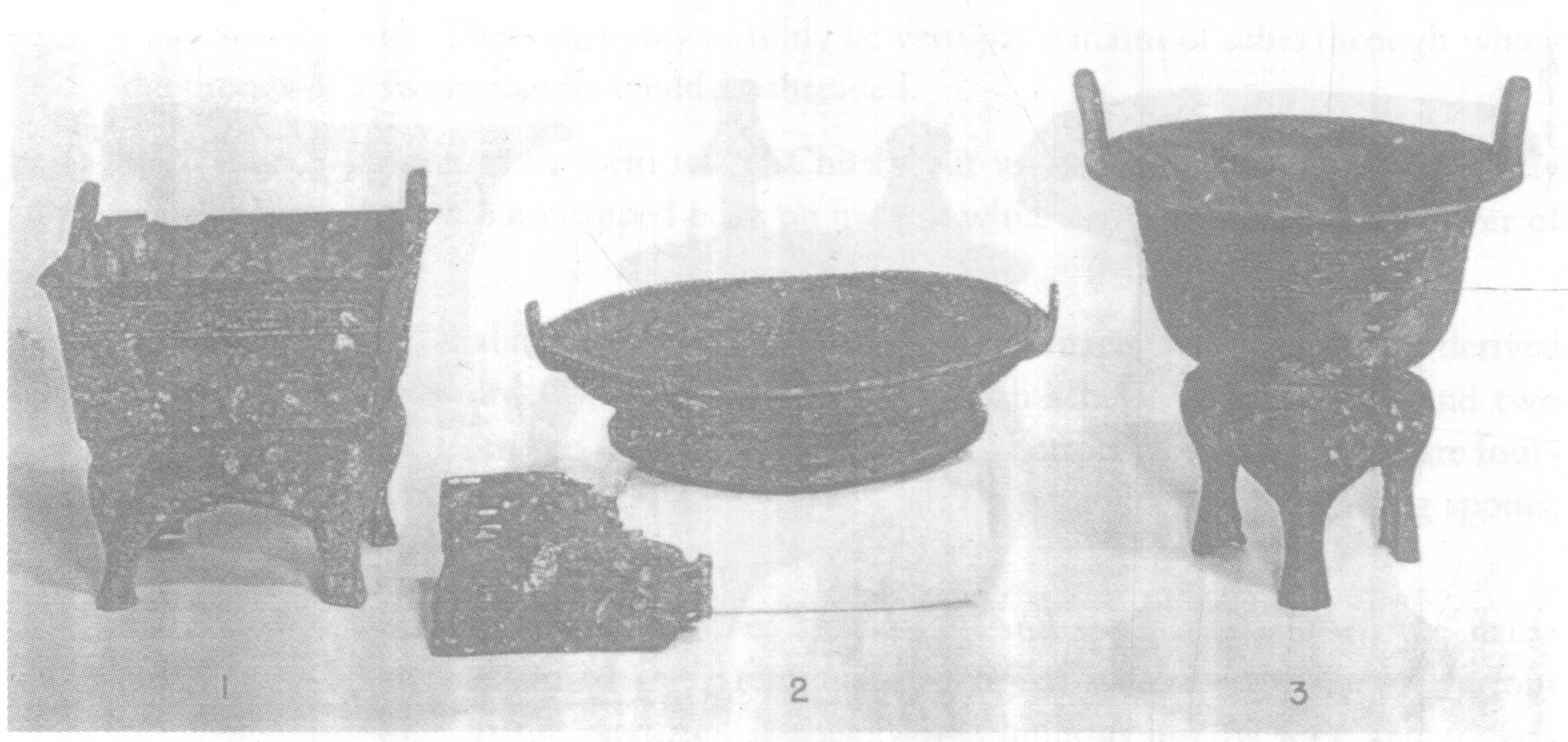


PLATE XCV. Two-colander set (NB.3202,3175,3176; pp. 174, 175)



PLATE XCIV. Wine beaker of the Tsun type, with inscription (NB.2629; p. 174)



PLATE XCVI. Bronze beaker and libation cup (NB.2598.2596; p. 175)



PLATE XCVII. Pewter set. Two wine pails of the Yu type and a food container of the Kuei type (see pp. 175, 176)

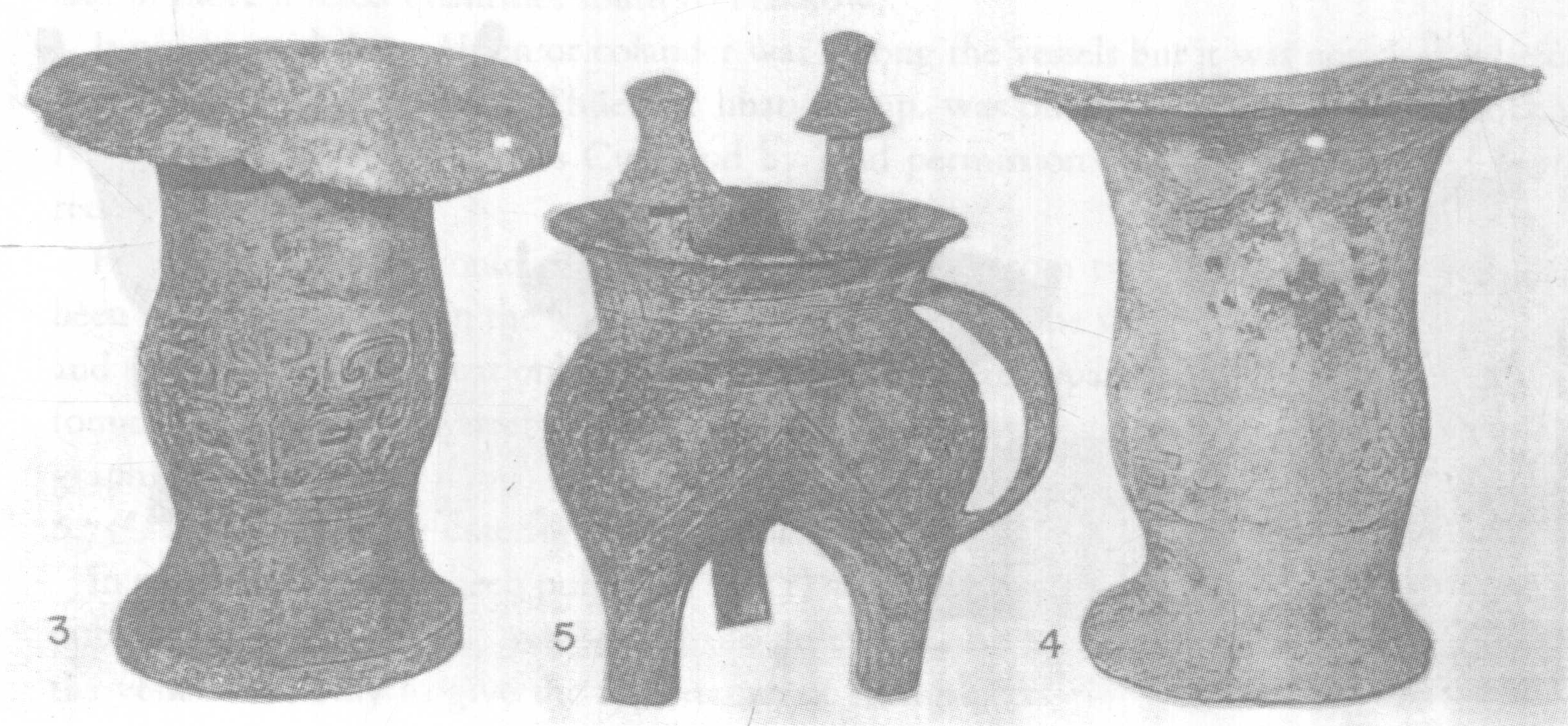
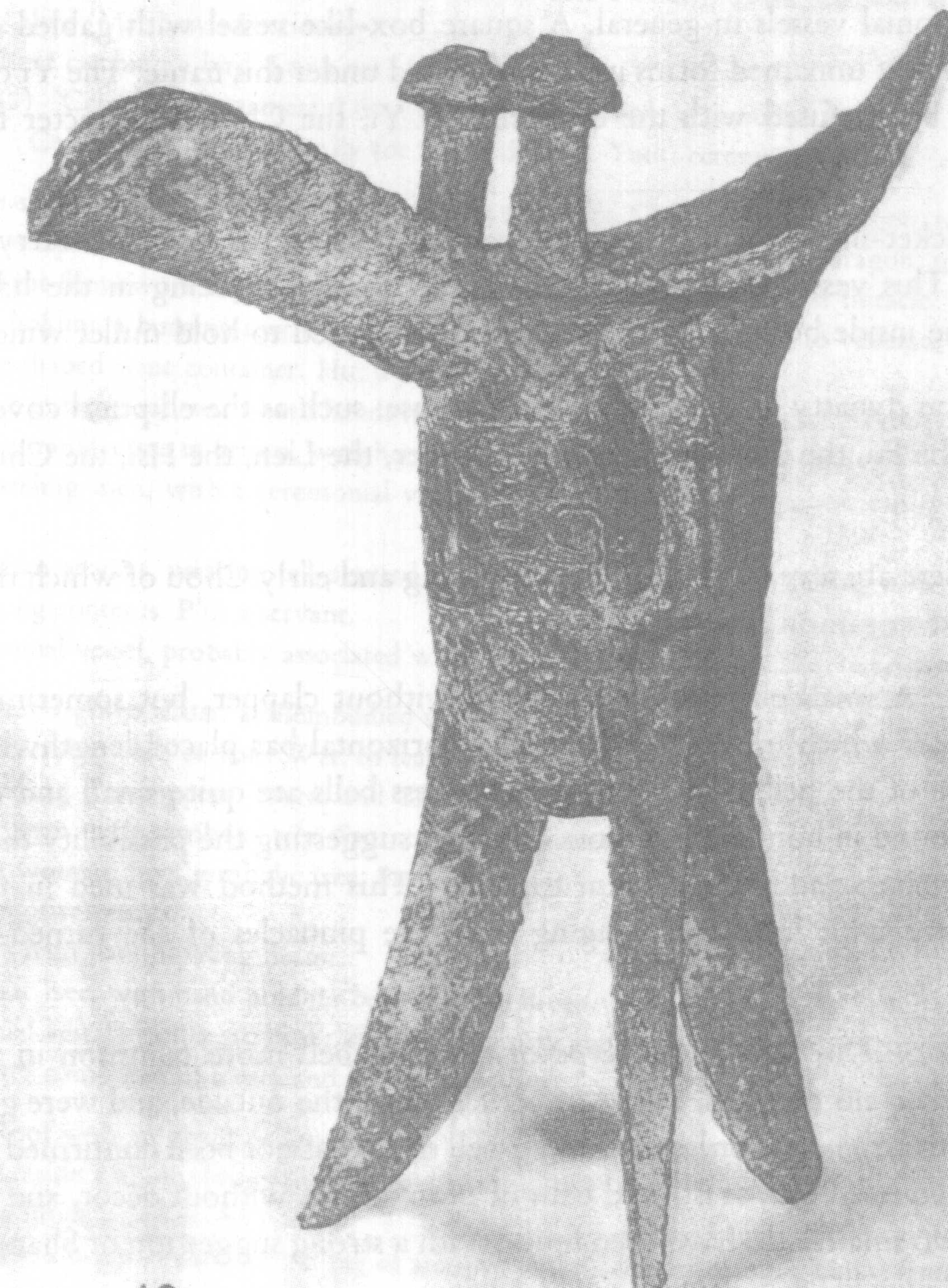


PLATE XCVIII. Pewter set. Two beakers of the Tsun type and a wine container of the Chia type



PLATE XCIX. Pewter set. A wine beaker of the Ku type and two libation cups of the Chüeh type

APPENDIXES



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Plate C. Pewter set. Libation cup of the Chüeh type

APPENDIX A

CHRONOLOGICAL LIST OF SHANG KINGS

THE NAMES of the rulers of the Shang dynasty, and their line of succession as given by Mr. Wang Kuo-wei, with approximate dates of accession, are as follows:

SHANG ONE (*c.* 1766 to *c.* 1400 B.C.)

GENERATION	NUMBER	NAME	RELATIONSHIP	APPROXIMATE DATES
I	1	Ta-I (T'ang)	Founder	1766
II	2	Ta-Ting	Son of 1	
II	3	Wai-Ping	Son of 1	
II	4	Chung-Jen	Son of 1	
III	5	Ta-Chia	Son of 2	1753
IV	6	Wu-Ting	Son of 5	1720
IV	7	Ta-Keng	Son of 5	1691
V	8	Hsiao-Chia	Son of 7	1666
V	9	Yung-Chi	Son of 7	1649
V	10	Ta-Wu	Son of 7	1637
VI	11	Chung-Ting	Son of 10	1562
VI	12	Wai-Jen	Son of 10	1549
VI	13	Ho-Tan-Chia	Son of 10	1534
VII	14	Tsu-I	Son of 13	1525
VIII	15	Tsu-Hsin	Son of 14	1506
VIII	16	Wu-Chia	Son of 14	1490
IX	17	Tsu-Ting	Son of 15	1465
IX	18	Nan-Keng	Son of 16	1433
X	19	Yang-Chia	Son of 17	1408
X	20	P'AN-KENG	Son of 17	1401

SHANG TWO (*c.* 1400 to *c.* 1122 B.C.)

GENERATION	NUMBER	NAME	RELATIONSHIP	APPROXIMATE DATES
X	20	P'AN-KENG	Son of 17	
X	21	Hsiao-Hsin	Son of 17	1373
X	22	Hsiao-I	Son of 17	1352
XI	23	Wu-Ting	Son of 22	1324
XII	24	Tsu-Keng	Son of 23	1265
XII	25	Tsu-Chia	Son of 23	1258
XIII	26	Lin-Hsin	Son of 25	
XIII	27	Keng-Ting	Son of 25	1219
XIV	28	Wu-I	Son of 27	1198
XV	29	Ta-Ting	Son of 28	1194
XVI	30	Ti-I	Son of 29	1191
XVII	31	Ti-Hsin	Son of 30	1154–1122

Of the above names all are found on the inscribed bones, except possibly No. 26, and the last two, Ti-I and Ti-Hsin, or the other name the latter is known by, Chou-Hsin.

APPENDIX B

LIST OF NAMES OF EARLY CHINESE BRONZE CEREMONIAL VESSELS

THE GENERAL FORMS of the bronze vessels may be listed as follows:

(1) CHIA This wine container is usually of tripod form, with one side handle and two capped posts rising from the rim. It has features connecting it with the Chüeh libation cup, but is larger, and has no pouring spout. It was used to warm liquids over a fire.

(2) CHIH A small graceful wine vessel, sometimes tall and slender, and sometimes short and ovoid. It may carry a cover, though this is unusual, and may have vertical tube "ears" on the sides. These ears may possibly be vestigial remains of tubes through which the thongs of a swing handle could be threaded.

(3) CHIOH This is similar in form to the Chüeh, but its two pointed spouts are usually symmetrical, and it has no capped posts on its rim, while it sometimes carries a cover of zoomorphic design.

(4) CHÜEH A ceremonial libation cup of a peculiar helmet shape, said to have been derived from the form of a bird. It was usually a tripod, with a handle on one side, and two capped posts rising from the rim. Variations are a flat-bottomed form and a square four-legged type. It was placed over a charcoal fire to heat wine. It has two pouring spouts, one trough-like, the other flat and pointed.

(5) HO (or HUO) A mixer, with a cover and handle and spout. As the Chinese name implies, it was probably used for ceremonial mixing of wine and water, or various kinds of spirits used in the sacrifices. It usually had bulbous hollow legs, and so was used over a fire, and it is found with three and sometimes four legs.

(6) HU This is a very general name which is applied to bottle-shaped vessels with smaller mouths.

(7) KU A wine container of slender beaker shape, similar to the beaker-shaped Tsun but smaller and with a wider trumpet-shaped mouth. It may have been used for ceremonial libations.

(8) KUANG This is also a mixer, but shaped like a ewer and with zoomorphic cover. The body of this vessel is usually covered with animal designs. A ladle was sometimes used with it, although it was itself a pouring vessel.

(9) KUEI (or TUI, or CHIU) A squat-shaped bowl, with foot-rim and with or without vertical side handles. It probably contained cereal offerings. In Shang times it does not seem to have carried a lid, but by Middle Chou a lid was common. Sometimes it stood on a square base.

(10) LEI (or HU) A liquid container, which is usually of large size but is sometimes small, and may be equipped with a close-fitting lid. It may or may not have ears, and there is wide variation in its forms.

(11) LI A tripod with bulbous legs for quick heating of liquids, with or without ears.

(12) LU A shallow flat-bottomed circular vessel, with low feet of zoomorphic form and usually equipped with carrying chains. It is sometimes spoken of as a food vessel, but since many examples are quite large, twenty or more inches in diameter, it may possibly be a charcoal brazier on which certain of the wine vessels would stand.

(13) MIN This is a more or less general name, used to include a wide range of shapes, particularly squat wide-bodied vessels with rather small mouths.

(14) P'AN A wide, shallow laver pan with prominent foot-rim, either with or without loop handles. It was probably used for ceremonial ablutions, or possibly as a food platter.

(15) P'ING This name, although used in a general way to designate any bottle-shaped vessel, properly belongs to Late Chou and Han, but is now coming into use for all periods.

(16) P'OU A small-mouthed wide-bodied vessel, which may have been used to contain pickles or liquids. It is sometimes similar to the Lei in shape, with or without cover and ears.

(17) TING These were either hemispherical bowls with three legs or square vessels with four legs, and the legs are tall and not bulbous. They were used over a fire, and may have been used to cook small animal offerings, such as hare or fowl. Skeletal remains of small animals have been found in these vessels. A type sometimes called the Wen-Wang Ting had graceful animal-form legs, and the design on the body was usually inlaid with black lacquer.

(18) TOU A pedestal-stemmed platter or bowl, sometimes fitted with a cover and probably used for food offerings.

(19) TSUN A wine container of beaker shape, with a foot-rim. It was not used for heating wine. The name is also a general term for ceremonial wine vessels, and is usually applied to types ranging outside the specific groups. Zoomorphic forms, with covers, are also included in this group.

(20) YEN (or HSIEN) This steamer may be of two parts, the lower half for the water to be boiled, and the upper colander half for the material to be steamed. It may also be of one piece, with a perforated grill separating the upper from the lower half. It may be either three-legged or four-legged, and the legs are usually bulbous in form. One of the Yen in the Royal Ontario Museum had lumps of copper-corroded millet grain in the vessel.

(21) YI (or I) A ewer of sauce-boat shape, probably for pouring water or wine. This

vessel appears first at the end of Early Chou. Its prototype was probably the Kuang ewer.

(22) YI (or I) This name includes a variety of shapes and seems to be a convenient term to cover ceremonial vessels in general. A square box-like vessel with gabled cover is one of the important unnamed forms usually included under this name. The Yi of this group should not be confused with the ewer-shaped Yi, the Chinese character for which is different.

(23) YU A bucket-shaped wine container, with pail swing handle, and carrying a close-fitting lid. This vessel is usually inscribed, the inscription being in the lid and in the centre of the inside bottom. It is said to have been used to hold millet wine.

Later in the Chou dynasty other vessels came into use, such as the elliptical covered Kuei or Hsü, as well as the Fu, the Chien, the Yi type of ewer, the Lien, the Hsi, the Chiao-t'ou, and the Po-shan Lu.

(24) BELLS There are several kinds of bells in Shang and early Chou of which the following are the more common types:

(*a*) LING A small elliptical bell, usually without clapper, but sometimes furnished with a clapper which moves freely along a horizontal bar placed lengthwise at the top of the inside of the bell. Some of the clapperless bells are quite small and delicate, and have been found in bunches of a score or more, suggesting the possibility that they were sounded by the wind jostling them together. This method was used in China in the later centuries with light bells hanging from the pinnacles of the turned-up eaves of pagodas.

(*b*) CHUNG This is a heavier type of elliptical bell more common in Later Chou. These bells had no clappers, but were struck from the outside, and were graded in sets from small to large. The ordinary Chung bell so far has not been confirmed as of Shang, but cannot be ruled out, as isolated bells of simple type, without décor, and with flanges along the two small ends, have been found with a strong suggestion of Shang derivation.

(*c*) NAO A bell with a socketed handle held up with the mouth of the bell above; the bell is beaten on the lip where the metal is purposely thicker. These bells are graded from small to large, as may be seen by the three in Group X with the bird and Ko graph.

The Ch'eng is similar to the Nao in form, but with more decorative designs. The To is later but similar and usually has a long bronze handle, which is not socketed for a wooden handle.

(*d*) CH'ING So far no bronze sounding plaques have come to light in Shang, but they need not be ruled out, for stone Ch'ing (sonorous stones) have come from Anyang excavations.

CEREMONIAL GRAPHS ON ORACLE BONES, AND KEY

CEREMONIAL GRAPHS ON ORACLE BONES



MODERN CHINESE SCRIPT DEVELOPMENTS

	1	2	3	4	5	6	7	8	9	10
A	祝	沐	浴	盡	盥	豐	酒	隶	熺	宣
B	樹	謝	糞	盖	羔		灶			赫
C	召	福	祿	盦	盂			敔		壺
D	烝	巫	彝	鑊	羅	甗	甗	甗	鼎	鼎
E	虬	虬	異	窔	壺	[illegible]	[illegible]	鄉	僕	禧
F	鬼	畏	从	侸	[illegible]			鼓	禋	羊
G	宗	宗	向	安	家	爵	爵	斝	昷	血
H	癸	癸	癸	癸	癸	木	尞	帝	帝	夭

KEY TO TABLE OF CEREMONIAL GRAPHS

(NOTE: Most of these readings are according to Lo Chen-yü. The romanized word, and meanings at the end, are script developments in modern use as given above. For relative tables of early bone and bronze script, see Joseph Needham: *Science and Civilization in China*, Vol. 2 (Cambridge, 1956) Table 11, Ideographic Etymologies, pp. 218–231.)

A (1) A spirit, water, and a kneeling man. CHU: to invoke, pray.
(2) A vessel, and a man washing his face; probably a ceremonial ablution. MEI: a place-name.
(3) A man in a vessel containing water. YÜ: to wash or bathe.
(4) A stylus or brush being dipped into a vessel of water; possibly an act of consecration of the stylus. CHIN: to exhaust (the contents of a vessel by fire).
(5) Washing the hand in a vessel. KUAN: to wash the hands.
(6) A ceremonial symbolic object. FENG: abundant, luxuriant.
(7) A ceremonial wine vessel, with water beside it. CHIU: wine.
(8) A hand grasping a metal rod being heated in fire, probably for singeing the Oracle Bones. PO: a poker.
(9) A symbolic tree over a fire. HSI: ancient worship of lucky stars. (Williams' Dictionary.)
(10) A symbolic tree with a covering hood or pall.

B (1) Vessel, tree, and a hand. SHU: a tree.
(2) Two hands holding a mat, or more probably a rolled mat. HSIEH: to thank, thanks.
(3) Vessel, rice, and two hands. YI: a general class of ceremonial vessels.
(4) Ram in a ceremonial vessel. KAI: to cover, to build, to seal.
(5) Ram over fire. Possibly name of a Shang ancestor. KAO: a lamb, a kid.
(6) A burning fire, with two hands receiving it ceremonially.
(7) A fire burning under the kitchen range. TSAO: kitchen range.
(8) A burning flame above the capital palace.
(9) A burning flame, over fire, above the capital.
(10) Two fires and a flame above the capital, probably signifying the awe and majesty of the palace. HSIA: to fear.

C (1) Two ceremonial vessels, two hands, and an oracle symbol. CHAO: to call, or summon or invoke.
(2) Wine vessel held in two hands, with a good omen or spirit. FU: happiness.
(3) A symbol in which a spirit and water are prominent. LU: a favour or gift, prosperity.
(4) Two ceremonial vessels and two hands. AN: a cover of a vessel or tripod.
(5) Ceremonial vessel with shield character above it. YÜ: a basin, a large cup.
(6) Two hands supporting a bamboo book, over a good omen or spirit.
(7) Oneself, over a ceremonial vessel, with Yi, the cyclical character designating the second day of the week, by the side. Would this refer to a purification ceremony performed on the Yi day?
(8) Hand holding a beater or baton, over a ceremonial object. CH'IAO: a club or baton; to knock or strike or beat.
(9) An arrow, representing a flame, on a pedestal or symbolic tree; possibly a lamp.
(10) Bottle-shaped vessel with cover. HU: a pot, a jug, a vase.

D (1) Two hands holding a vessel, from which steam ascends, above which is the symbol for growing millet. CHENG: to steam, to cook vegetables by steaming (as in the winter sacrifice).

(2) Two hands ceremonially offering jade, under a roof of probably an ancestral temple. WU: a medium; sorcery; the service of spiritual beings.

(3) A ceremonial object or vessel, held in two hands. YI: ceremonial cups or vessels; a rule or law.

(4) A bird being boiled in a cauldron. HU or HUO: to boil, a boiler. Connected with ancient punishment of boiling alive (Matthew's Dictionary).

(5) A hand net catching a bird. LO: a net.

(6) (7) and (8) Ceremonial steamers. Usually in two parts. YEN: ceremonial steamers.

(9) and (10) Ceremonial vessels, usually for food offerings. TING: ceremonial vessels.

E (1) Dragon-shaped object with Hsin crest, held in two hands. CH'IU: a young dragon; to wriggle or curl.

(2) Dragon-shaped object with Kan crest, held in two hands. CH'IU: a young dragon; to wriggle or curl.

(3) An upright framework supported by two hands. YI: strange; a wonder or miracle.

(4) A hand holding a burning torch, probably in the ancestral temple. SEU: to venerate the ancestors.

(5) A bottle-shaped wine container. HU: a jug or vase.

(6) Kneeling transgressor, with both hands in the stocks, by a stream of water. TSUI-JEN: a transgressor.

(7) Kneeling transgressor in prison, with hands shackled. TSO-LAO: to be a captive.

(8) Two kneeling men, with a ceremonial vessel between them. CH'ING: auspicious; good luck; a high official.

(9) A barbarian servant, wearing tall plumed head-dress, and with a tail, offering in both hands a vessel with steaming contents. P'U: a servant.

(10) A ceremonial vessel, probably associated with divine blessing and joy. HSI: happiness.

F (1) Symbol for a ghost. KUEI: a disembodied spirit; demon.

(2) A ghost carrying club or staff. WEI: to fear, to dread; awe.

(3) Two kneeling worshippers. TSUNG and TS'UNG: cousins; to follow, to obey.

(4) Kneeling man, by a symbolic tree. SHU: to be erect, like a tree.

(5) Kneeling woman, by a symbolic tree. SHU: (unknown).

(6) A kneeling fire-bearer.

(7) A bell (?) with hand holding beater.

(8) A symbolic tree, with hand holding beater. KU: a drum.

(9) Ceremonial vessel. YIN: a sacrifice offered with purity and reverence (Giles' Dictionary, 13, 234).

(10) A character composed of a ram and an ox. YANG-NIU.

G (1) and (2) Roof with an omen or spirit under it. TSUNG: ancestral temple; clan.

(3) A mouth inside a house. HSIANG: towards; in favour of.

(4) A woman inside a house. AN: peace.

(5) A pig inside a house. Probably the pig of sacrifice in the ancestral temple. CHIA: family, clan.

(6) and (7) Ceremonial wine cups. CHÜEH: wine libation cups.

(8) Ceremonial vessel. CHIA: ceremonial wine container.

(9) The sun in a ceremonial vessel. WEN: compassionate; to feed a prisoner.

(10) Blood in a sacrificial vessel. HSÜEH: blood.

H (1) (2) (3) (4) and (5) Different forms of the tenth and last cyclical day stem. KUEI: the last of the Ten Heavenly Stems.

(6) Pictograph of a tree—branches above, roots below. MU: tree, wood.

(7) A tree or wood on a flaming fire. LIAO: wood fuel for the sacrifices.

(8) and (9) Faggots of wood bound together for the sacrifice to the "Above" or Supreme Being, representing God, or the sacrifices to God. TI: God, Supreme Ruler.

(10) The graph for "large," with a square or enclosure above. T'IEN: Heaven—a place. In the succeeding Chou dynasty it was often personified, and used to designate the deity.

PROBABLE DATE OF THE ELEPHANT TOMB, GROUP I

VERY FEW Western or Far Eastern scholars have made an intensive study of the culture of ancient China as revealed by the script of the Oracle Bones of Honan, and of the ancient Chinese bronzes. One who has attained eminent distinction as an authority on this subject is a Canadian missionary to China, Dr. James Mellon Menzies, who for many years lived in Honan, in the city of Anyang, where the Oracle Bones and many very important ancient bronzes have come to light.

When the Royal Ontario Museum of Archaeology required expert assistance in classifying its early bronzes, Dr. Menzies was invited to undertake this work. For several years he applied himself to this task, concentrating particularly on the development and sequence of the Chinese halberd, or Ko. One result from this research has been a monumental work—"Shang Ko: A Study of the Characteristic Weapon of the Bronze Age in China; 1311–1039 B.C."—a volume of 550 pages still in manuscript, together with nearly 200 plates of line-drawings, of which several are given in the text above under Group I.

Among these halberds (Ko) are nine, now in the Chinese collection of the Museum, which originally came, as far as can be known, from the Elephant Tomb (Group I). This Appendix provides an excerpt from Dr. Menzies' manuscript dealing with one of these halberds (Ko-70), which conveys valuable information bearing upon the dating of that particular tomb. The sequence numbers of these nine halberds, and the catalogue numbers, together with their respective line-drawing numbers are found in Appendix E.

EXCERPT FROM A STUDY OF SHANG DYNASTY HALBERDS

BY REV. DR. JAMES M. MENZIES

(This excerpt deals particularly with Ko-70, NB.3975)

Ko-70 Inscribed bronze Ko — Plates XX, XXI

R.O.M.A. NB.3975, obtained in Honan in 1933, along with 61, 64, 95, 133, 138, 160; bronze knife with food prong and elaborate open-work dragon handle (NB.3961. *I.L.N.*, Apr. 20, 1935, p. 640, Fig. 9) and a flat-bladed adze (NB.3978. *I.L.N.*, Apr. 20, 1935, p. 641, Figs. 13 and 14). Said to have come from the tomb with the covered gravy-boat type of vessel, Kuang, decorated with an elephant design (*I.L.N.*, May 18, 1935; Extra Plate IV, Fig. 2, Colour; also p. 888, Fig. 4, and p. 889, Fig. 12). This tomb is said to be south of Ta-ssu-k'ung village, across and north of the Huan River, just east of the Waste of Yin and Hsiao-t'un village, Anyang Hsien. For a photograph of the reverse, see *I.L.N.*, Apr. 20, 1935, p. 641, Fig. 20. Restored length 205 mm. (8 1/8 ins.).

This Ko-70 is complete, except for a crumbling of the point; the metal is crystalline; dark green patina; traces of cloth; the mark of the haft is clearly outlined on the blade.

The thick centre of the blade acts as a stop ridge in front of the thinner trunnions. The blade tapers from the centre to a thin edge. No definite midrib. The hole near the back of the haft is 9 mm. (3/8 in.) in diameter and has been cast and reamed out with a drill.

The pictograph on the reverse is that of a naturalistic tiger Hu. The inscription on the obverse is of a man drawn full face with a large round head and a heart-like design on his body. On the shoulder of the man is a hafted Ko with a blade similar in shape to this very Ko-70. The shaft protrudes above the blade and is bent back slightly. On the end of the haft is a round knob. The size of the Ko is exaggerated in proportion to the figure of the man.

This graph of a man with a Ko on his shoulder is also found on a bronze cup for heating wine (*San-tai* 15.32.7. or *Hsü-yin* 2.18.11) where it is associated with the graph "chariot." The important parallel, however, is a flat-bladed adze or plane in the Royal Ontario Museum, NB.3978 (see *I.L.N.* Apr. 20, 1935, p. 641, Figs. 13 and 14). The Ko and the adze were obtained at the same time, and since the material, patination, and inscriptions are alike, they undoubtedly belong to the same set. In the upper of two panels on the blade of the adze is the figure of a man with a rounded head carrying a Ko upright with point facing outwards. The lower panel has a stylized striped tiger. It is evident that the graph of the man with the Ko held upright in his hand is a variant writing of the man with the Ko held on his shoulder. When this identity is realized it is then possible to equate the bronze graph with a well-known personage on the bone inscriptions: Tzu-Chih.

1. *Ts'ang-kuei* 209.4
2. *Ts'ang-kuei* 254.2; *Hou-pien* 1.22.6: Father Yi
3. *Ts'ang-kuei* 254.2; *Hou-pien* 1.22.6: Elder Brother Ting
4. *Chih-yü* 4.1; *Yi-ts'un* 14; *Hsü-pien* 5.12.5
5. *Chih-yü* 4.1; *Yi-ts'un* 14; *Hsü-pien* 5.12.5

Father Yi is King Hsiao-Yi, father of Wu-Ting, so that Tzu-Chih belongs to the reign of King Wu-Ting, 1255–1197 B.C. (1324–1266 B.C.), since these inscriptions are of this date.

In the *Shuo Wen* Dictionary (A.D. 100), Vol. 10, under the "great man," Ta radical, there is a graph of a "great man" and a Ko to which is added a phonetic with the sound "tieh." The definition quotes Ode 198, verse 4, line 3, using this character, while modern editions such as Legge, Vol. IV, page 132, use a different character pronounced Chih, but in whose make-up there is neither "great man" nor Ko. The bronze and bone graph which still existed in the *Shuo Wen* Dictionary of A.D. 100 had become obsolete and another more modern character of the same sound substituted in the modern Text of the Odes. The old meaning of "great" is however retained in the commentary. Mr. Tung Tso-pin, in his *Criteria*, page 379, lists Tzu-Chih as No. 3 among the individuals he calls "the twenty sons of King Wu-Ting." This personal name, Chih, depicting a "great man with a Ko held upright in the hand" also occurs on bronze vessels:

1. Hsien (steamer): *San-tai* 5.3.3; *Hsü-yin* 1.30.3; *K'o-chai* 17.2: Father Hsin
2. Chüeh (cup): *San-tai* 16.16.9: Father Keng
3. Chüeh: *San-tai* 16.16.10: Father Keng
4. Chüeh: *Hsü-yin* 2.3.2
5. Ting (cooking pot): *San-tai* 2.1.5
6. Ting: *San-tai* 2.1.6

Since Chih had vessels made for his Father Hsin and Father Keng, he must have belonged to the generation after the brothers King P'an-Keng and King Hsiao-Hsin. In other words, he was of the same generation as King Wu-Ting who would properly mention a living person on a bone inscription by his title, Tzu-Chih, and King Hsiao-Yi as Father Yi. Accordingly we see that "son" in this case cannot mean "son of Wu-Ting," but is merely the title of a son of the royal family, just as in the later Warring States period such titles were used as "king's son," Wang-Tzu; "duke's son," Kung-Tzu; "duke's grandson," Kung-Sun.

These sons, Tzu, listed on the bones, number not twenty, as given by Mr. Tung, but at least forty-eight in accordance with my own list. On several hundred bone inscriptions referring to them they play the rôles of grown men in charge of important functions in the state, rather than the rôles of children in a harem.

Tzu, "son," may be considered as an ancient homophone for the later Ssu, "officer in charge of"; the graph of the man carrying a Ko, on Ko-70, which is always preceded by Tzu on the bones, may mean "the officer in charge of the king's Ko." (The Ko took the place of a ceremonial mace in court ceremonies.) In the *Kuo Yü* (Stories of the States), *Chin Yü* (Chin State), Chapter 9, we read: "Duke Mu put his carved Ko on his shoulder and went out to see the ambassador"—*Mu Kung heng tiao ko ch'u chien shih che*. This vivid picture of a ninth century B.C. ceremony is suggested in the graph on Ko-70. Other Ko having names paralleled by Tzu on the bone inscriptions are Ko-71,75,77,79,81,86,95, and 111. Such court offices seem to have been retained within the royal family, for "son" on the bones undoubtedly often means "child," or as we would say, "prince" of the royal house.

If the graph on the obverse of Ko-70 be the name of an office, then the name on the reverse, which follows in ordinary inscriptions, is in all probability according to Chinese usage the more personal name "Tiger." Such a personal name is known on bone inscriptions where he is given another title, that of "Marquis" (Hou). See *Ching-hua* 7; *Ch'ien-pien* 4.44.6, 4.45.1, 4.45.2, 7.36.1; *Yi-ts'un* 375.

"Tiger" is not an uncommon name in any age, and it is only because Ko-70 and these two sets of bone inscriptions all refer to important personages in the same period that we suggest the possibility of their referring to the same individual. *Ch'ien-pien* 4.44.6 records an inquiry about "following Tiger, Marquis of Yung, in an expedition" against an enemy region.

With the name of his marquisate recorded, we are able to give the four names of this person:

1. He was a "son" (Tzu) or prince of the royal house in Wu-Ting's reign.
2. He was named "Tiger" (Hu), probably indicating his character—a name given to a grown man, and not to a child.
3. He was court officer in charge of the ceremonial Ko (Chih).
4. He was Marquis of Yung (Yung Hou).

Yung is the modern equivalent for this graph given by the first investigator of bone script, Mr. Sun Yi-jang. Meng is the pronunciation adopted by Mr. Tung Tso-pin from Mr. Ting Shan. I am not convinced, but have no other alternative to offer. The graph shows a bed enclosed by a tub-like cover at each end. Graphs with a bed seem to be related to the Royal Couch.

This Marquis of Yung, in Wu-Ting's reign, was the commander-in-chief of an expedition against the Chou people. See *Ch'ien-pien* 7.31.4, which also records the command to the owner of Ko-137 to follow him. No doubt one reason for the few bone inscriptions recording his court office is that he was popularly known during his lifetime as "Marquis of Yung," or as "Marquis Tiger." He was, however, given his royal court title "The great one with a Ko named Tiger" when buried, and his vessels inscribed accordingly.

Mr. Tung Tso-pin ventures a startling conjecture in his *Criteria*, p. 389, where he says that the personal name, Ming, of King Tsu-Chia is Tsai, a graph very similar to Chih, on the bones. This statement is based on *T'ai P'ing Yü Lan*, Chapter 83, which quotes the "Ancient Bamboo Annals." He then suggests that the graph on the bone inscriptions, which we have shown to be the same as that on Ko-70, is the personal name of King Tsu-Chia and that Tsai is a wrongly transmitted literary form. King Tsu-Chia was the third son in the succession to King Wu-Ting, and Mr. Tung Tso-pin considers "son great one with a Ko," Chih, to be a son of King Wu-Ting. But this can hardly be so, since the bronze ritual vessels were made by Chih for Fathers Hsin and Keng, and there are no brothers of King-Wu-Ting named Hsin and Keng. King P'an-Keng and King Hsiao-Hsin are a generation earlier, "fathers" of the generation of King Wu-Ting. The person whose name is inscribed on Ko-70 is a contemporary and not a son of King Wu-Ting and lived during his reign, 1255–1197 B.C. (1324–1266 B.C.)

J. M. M.

BIBLIOGRAPHY

Ch'ien-pien: Lo Chen-yü, *Yin Hsü Shu Ch'i Ching Pien*.
Chih-yü: Lo Chen-yü, *T'ieh Yün Ts'ang Kuei*.
Ching-hua: Lo Chen-yü, *Yin Hsü Shu Ch'i Ching Hua*.
Hsü-yin: Wang Ch'en, *Hsü Yin Wen Ts'un*.
San-tai: Lo Chen-yü, *San Tai Chi Chin Wen Ts'un*.
Ts'ang-kuei: Liu O, *T'ieh Yün Ts'ang Kuei*.
Yi-ts'un: Shang Ch'eng-tso, *Yin Ch'i Yi Ts'un*.
I.L.N.—Illustrated London News.

In the light of the above we have no hesitation in dating the Elephant Tomb to the reign of King Wu-Ting, that is 1324 B.C. to 1266 B.C. according to the orthodox chronology; or 1255 B.C. to 1197 B.C. according to a recently proposed revised chronology.

At the same time there is good ground for dating the two following sets of vessels, Groups II and III, to that period, and in association with the Marquis of Yung, the "Bearer of the Ko"; that is Group II, "The Bearer of the Ko"; and Group III, "The Bearer of the Heavenly Disk."

W. C. W.

LINE-DRAWINGS OF HALBERDS

SOME OF THE HALBERDS (Ko) are depicted on the plates, but line-drawings of a few of the others may be of some value in illustrating technical details of this characteristic Shang weapon. In the lists of Group I, nine halberds are listed and, of these, line-drawings of seven are given in the illustrations below, Figures 1–7. Of Groups II and III fourteen items are listed, and line-drawings of four are illustrated in Figures 8–11.

These drawings were made under the supervision of Rev. Dr. J. M. Menzies, together with about two hundred others which are in the collections of the Royal Ontario Museum. In the captions to the figures the Ko number is the sequence number of Dr. Menzies' list, and page numbers refer to the descriptions given in the above text. NB is the catalogue number in the Chinese Collection of the Museum. Items in Group I are found on pages 29 to 33; in Groups II and III on pages 80 to 81.

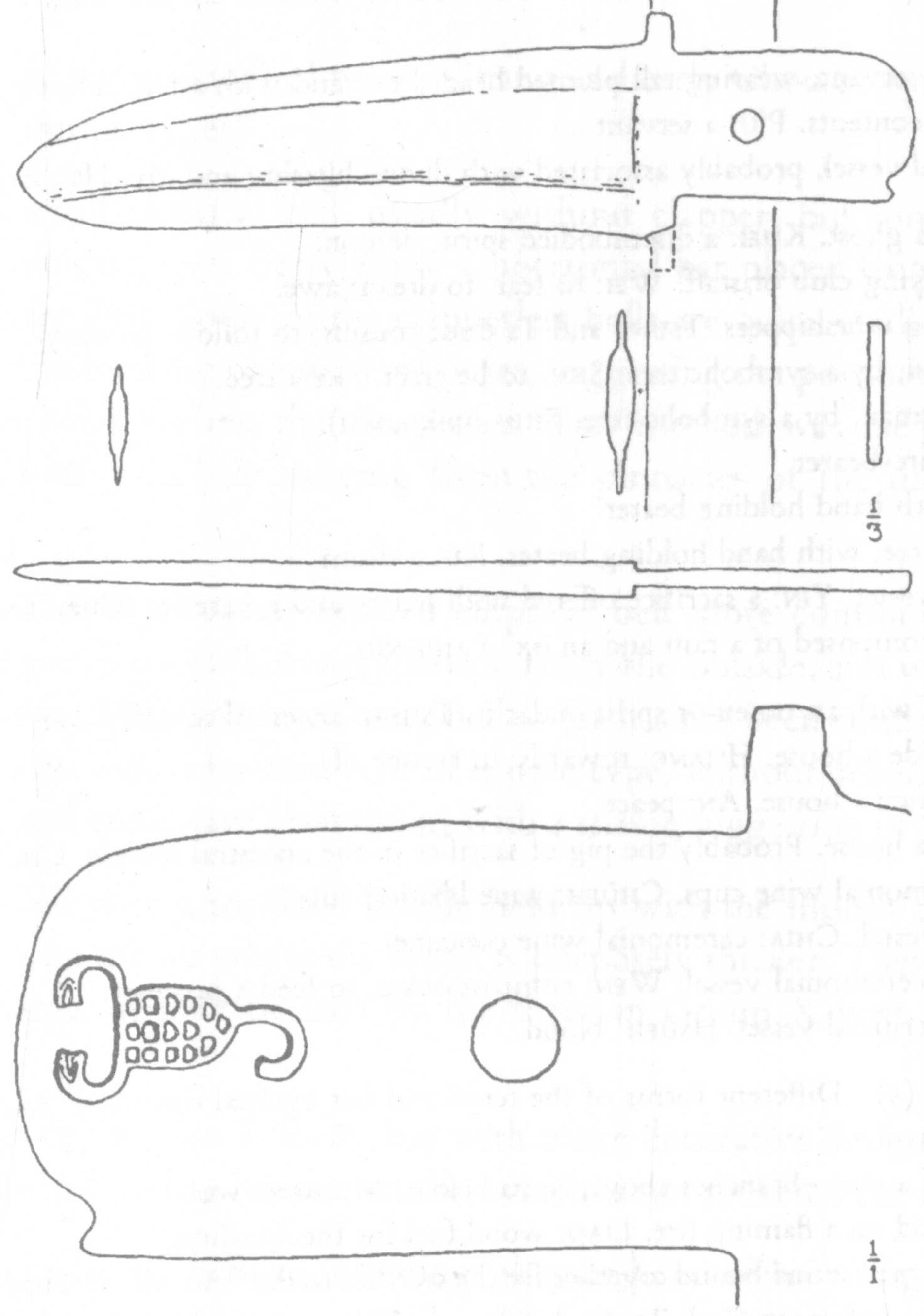


FIGURE 1. Ko-95 (NB.3974; p. 31)

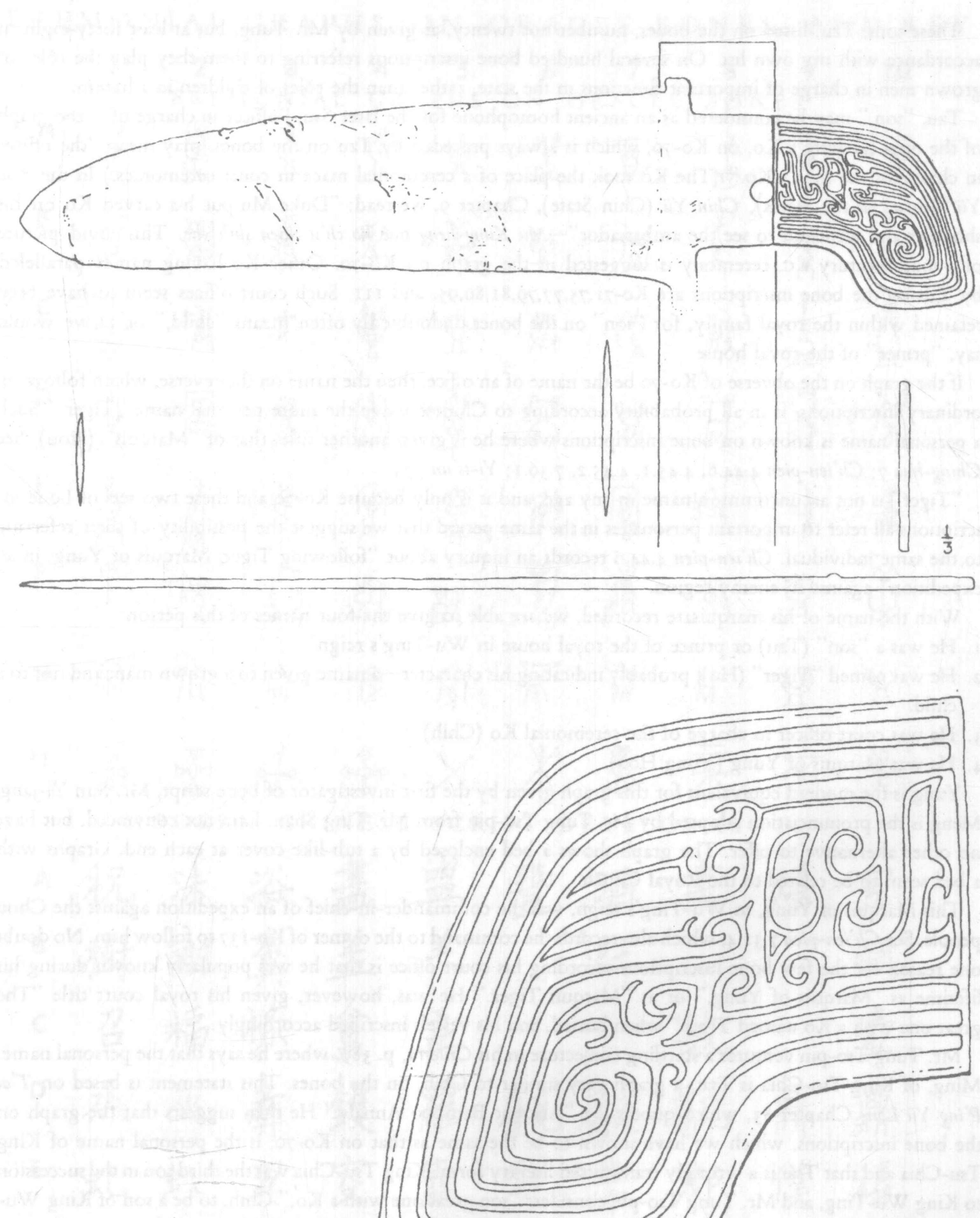


FIGURE 2. Ko-61 (NB.3979; p. 30)

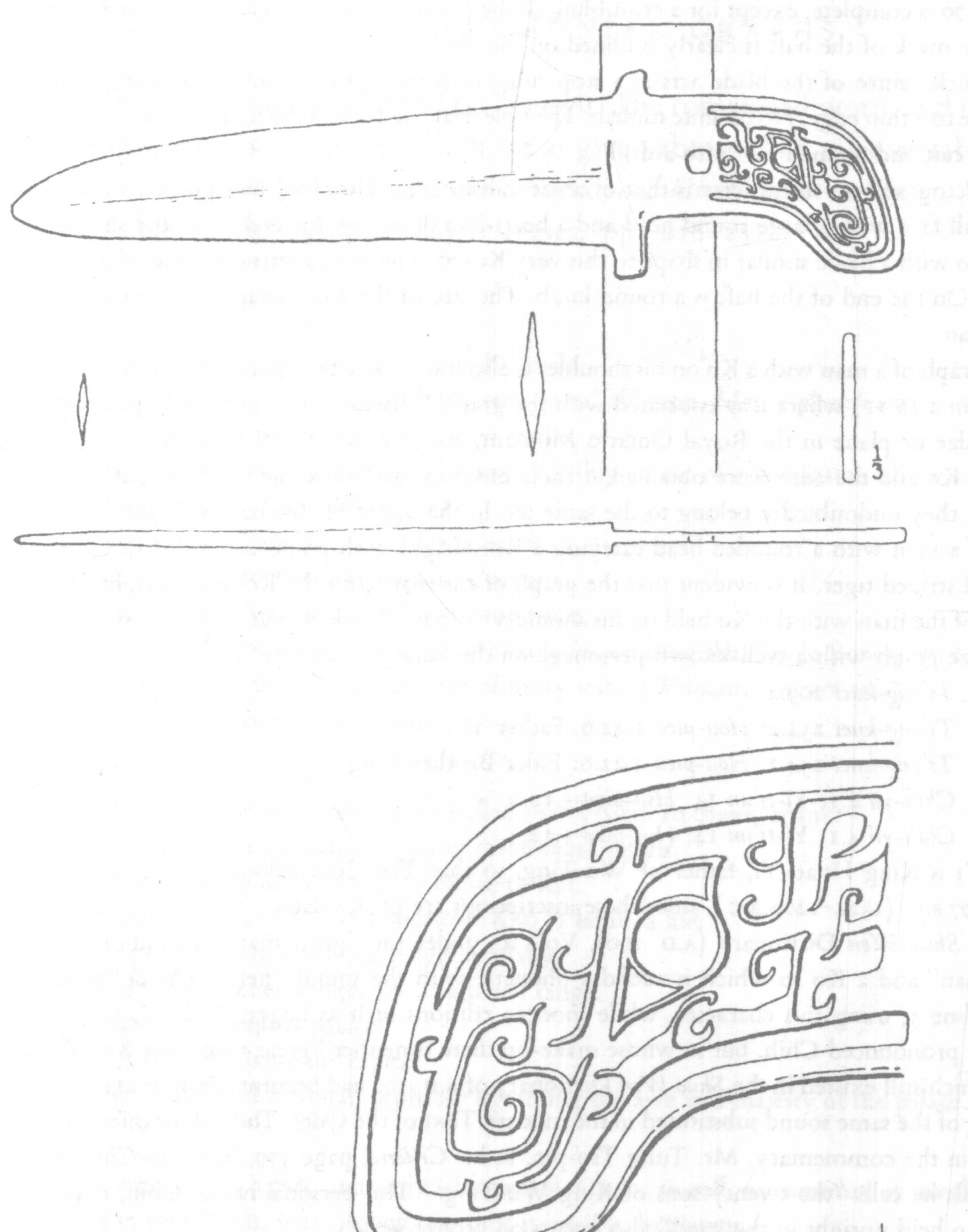


FIGURE 3. Ko-64 (NB.3980; p. 30)

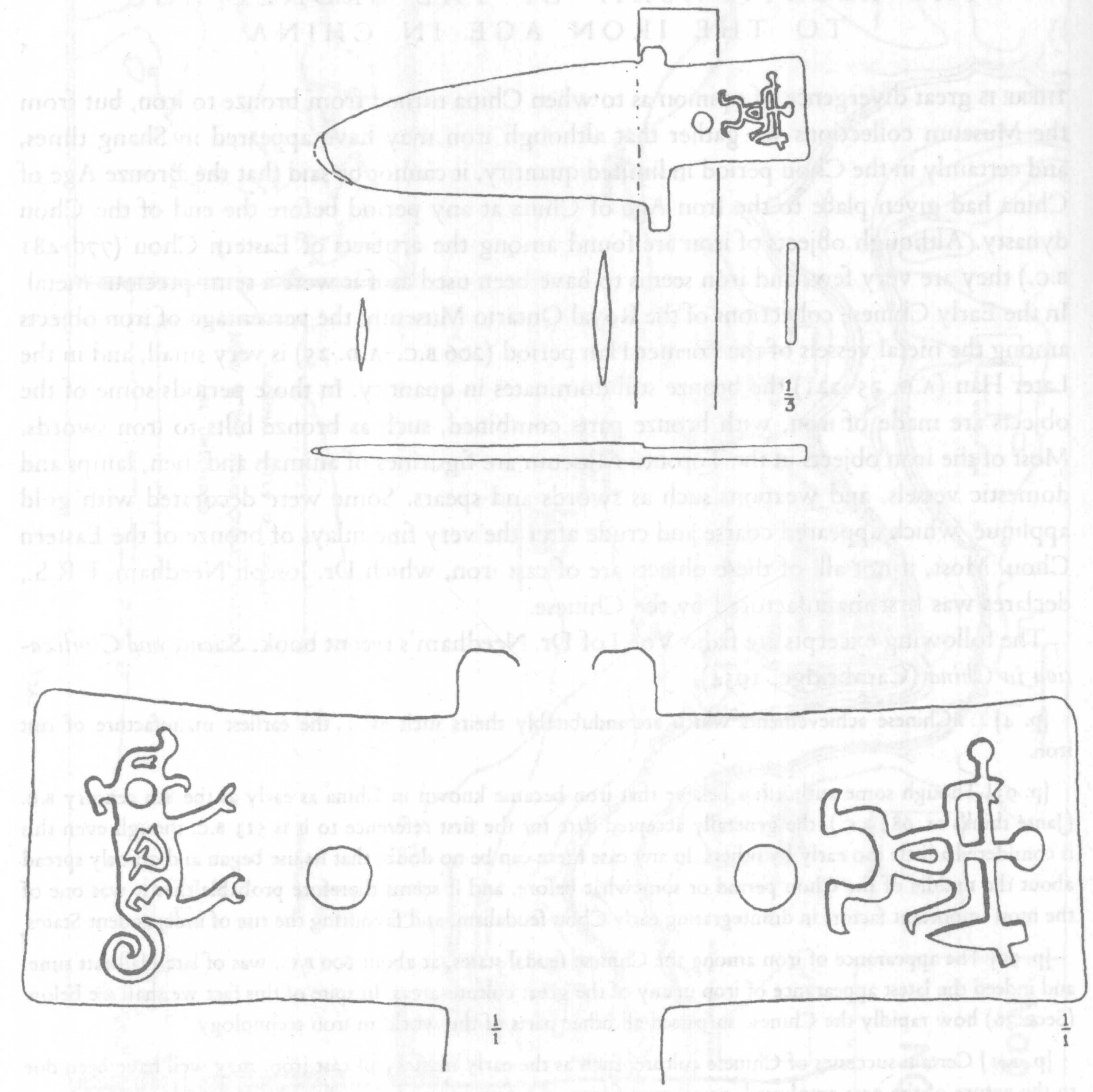


FIGURE 4. KO–70 (NB.3975; p. 30)

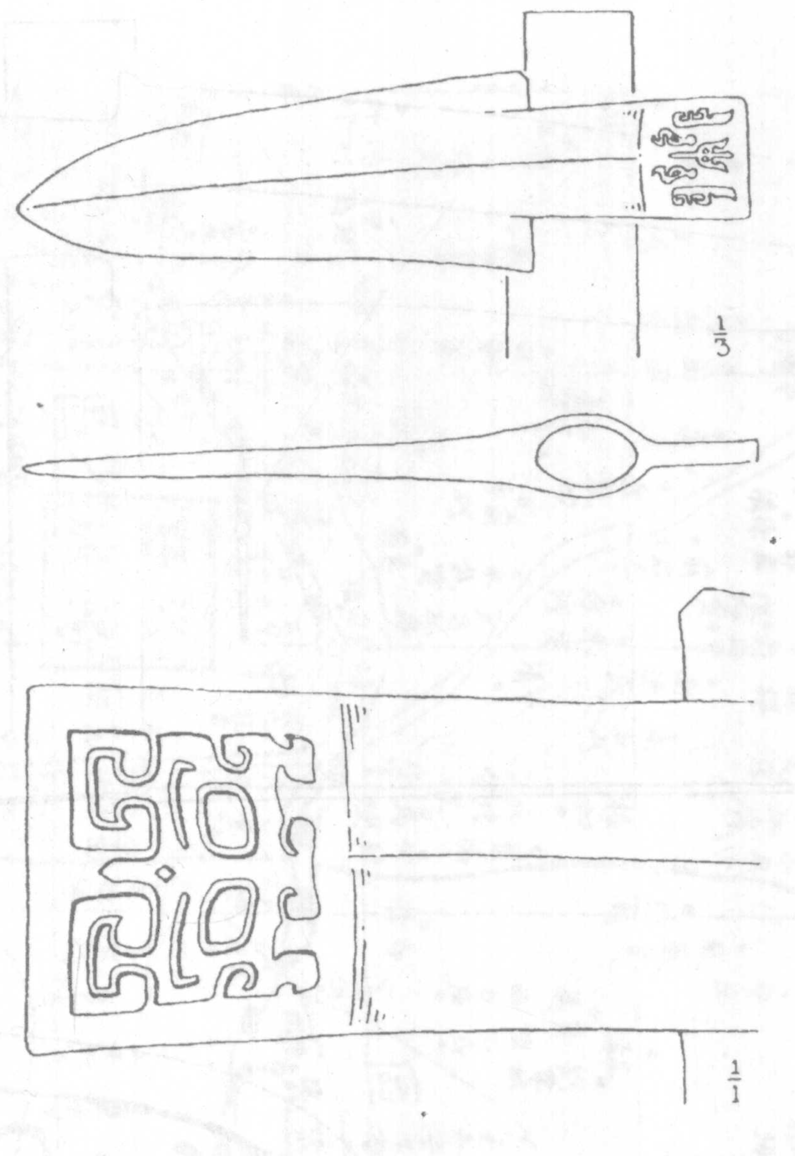


FIGURE 5. KO–133 (NB.3977; p. 31)

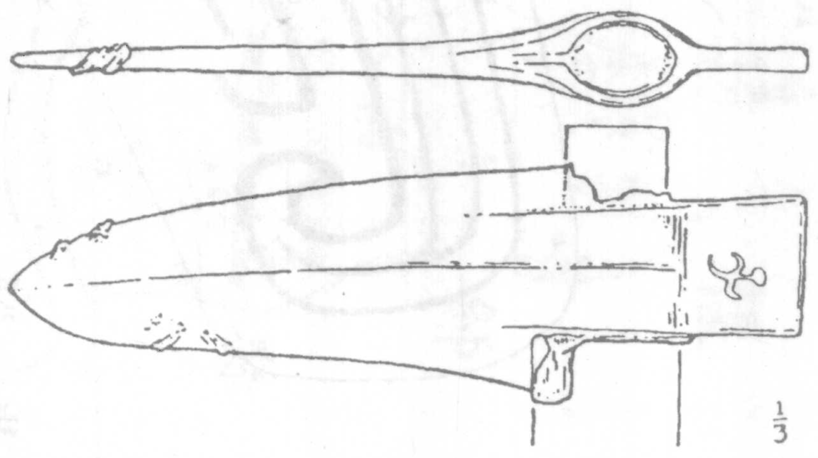


FIGURE 6. KO–138 (NB.3976; p. 31)

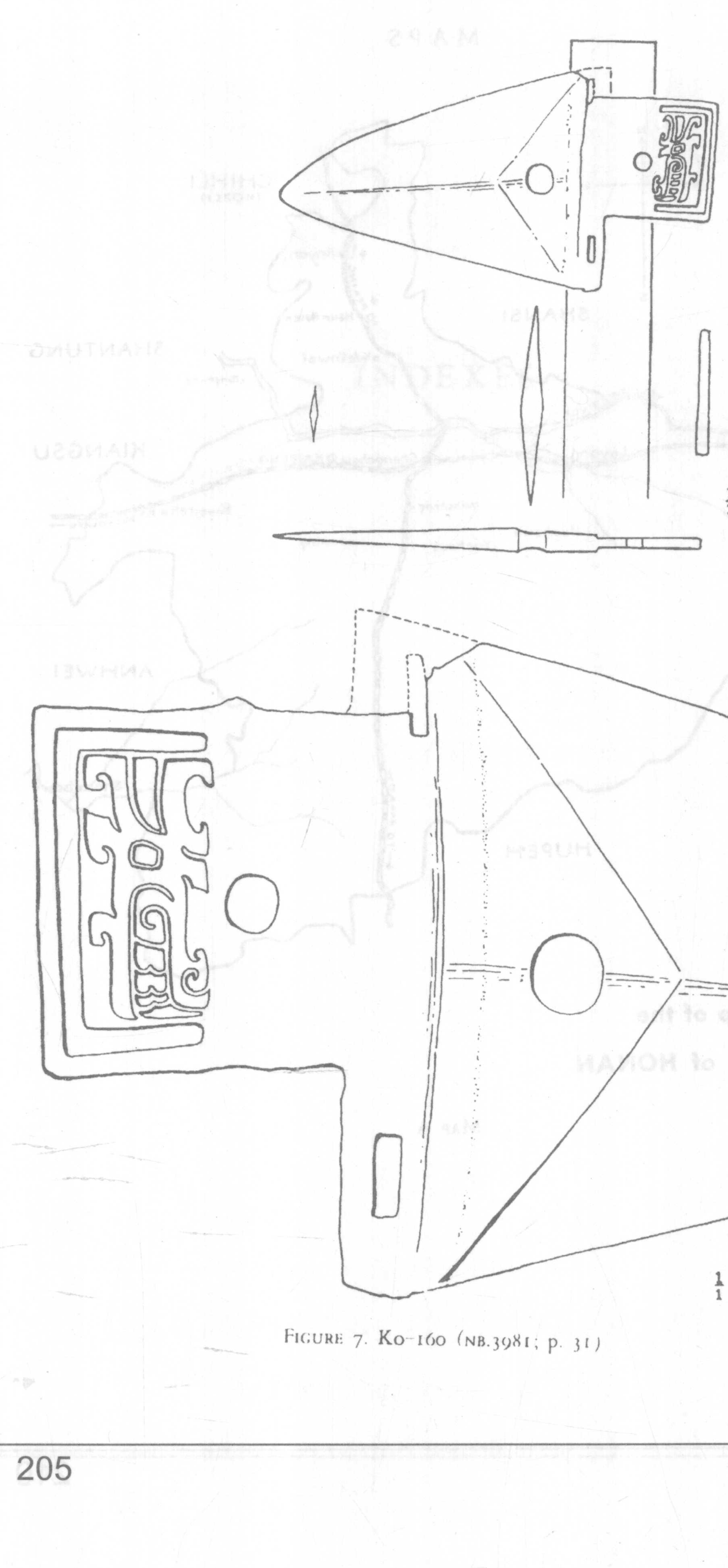


FIGURE 7. KO–160 (NB.3981; p. 31)

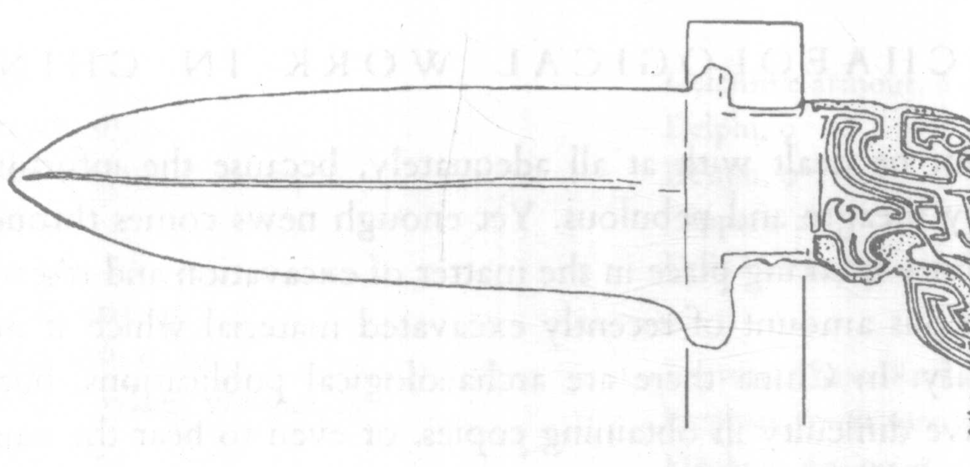


FIGURE 8. KO–42 (NB.2968; p. 81)

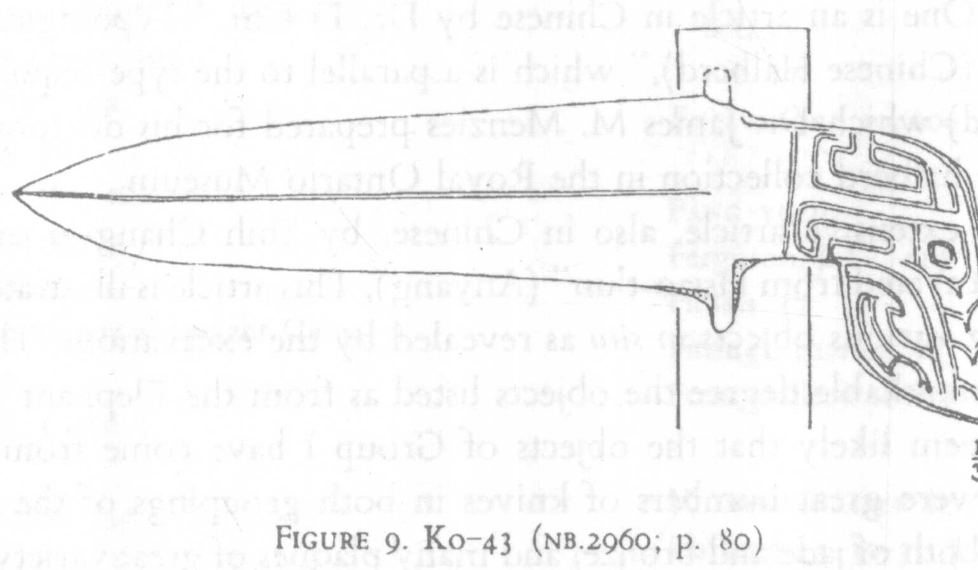


FIGURE 9. KO–43 (NB.2960; p. 80)

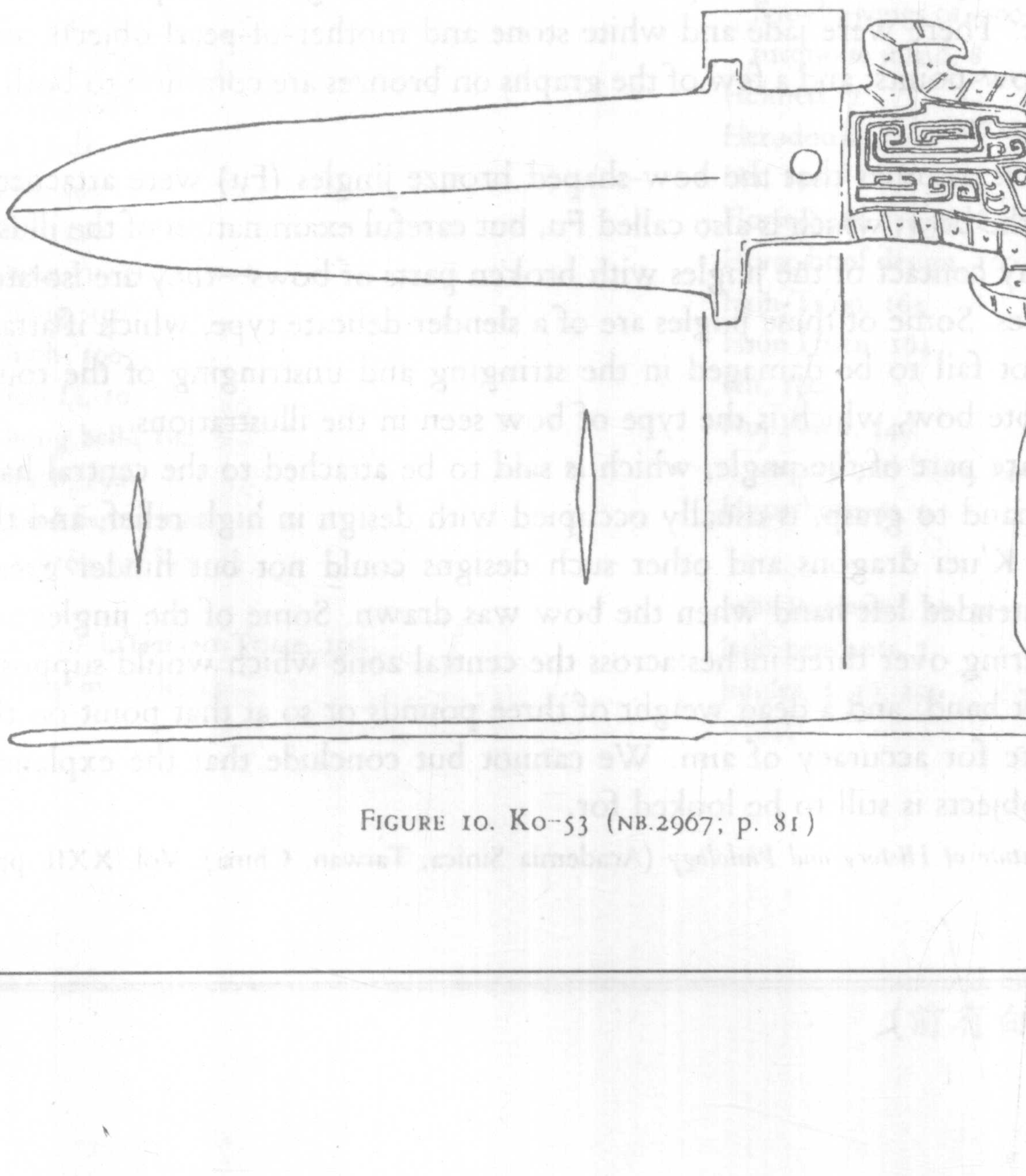


FIGURE 10. KO–53 (NB.2967; p. 81)

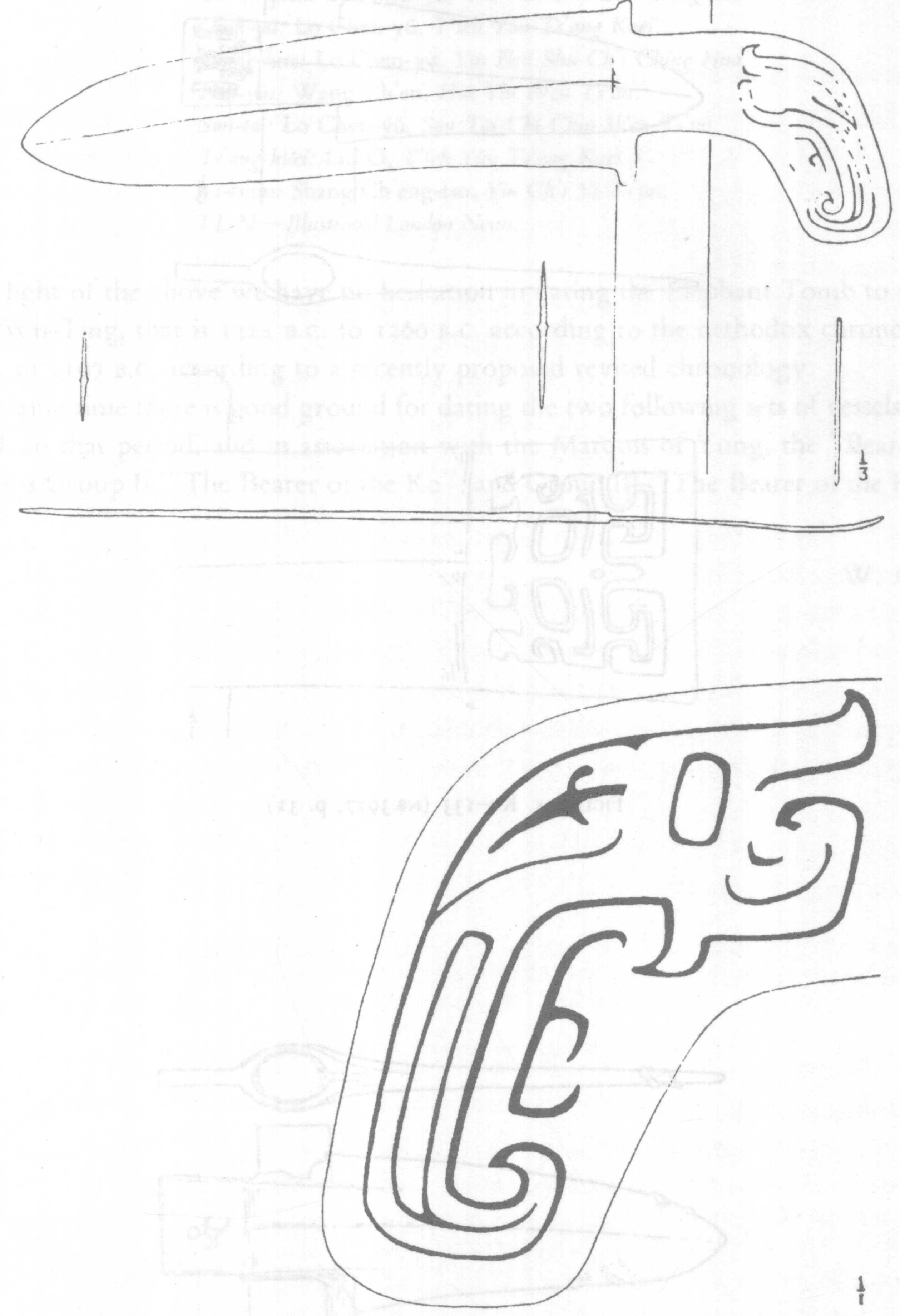


FIGURE 11. Ko 69 (NB.3221; p. 81)

THE RELATIONSHIP OF THE BRONZE AGE TO THE IRON AGE IN CHINA

THERE IS great divergence of opinion as to when China turned from bronze to iron, but from the Museum collections we gather that although iron may have appeared in Shang times, and certainly in the Chou period in limited quantity, it cannot be said that the Bronze Age of China had given place to the Iron Age of China at any period before the end of the Chou dynasty. Although objects of iron are found among the artifacts of Eastern Chou (770–481 B.C.) they are very few, and iron seems to have been used as if it were a semi-precious metal. In the Early Chinese collections of the Royal Ontario Museum, the percentage of iron objects among the metal vessels of the Former Han period (206 B.C.–A.D. 25) is very small, and in the Later Han (A.D. 25–221) the bronze still dominates in quantity. In those periods some of the objects are made of iron, with bronze parts combined, such as bronze hilts to iron swords. Most of the iron objects in the Toronto Museum are figurines of animals and men, lamps and domestic vessels, and weapons such as swords and spears. Some were decorated with gold appliqué, which appeared coarse and crude after the very fine inlays of bronze of the Eastern Chou. Most, if not all, of these objects are of cast iron, which Dr. Joseph Needham, F.R.S., declares was first manufactured by the Chinese.

The following excerpts are from Vol. I of Dr. Needham's recent book, *Science and Civilization in China* (Cambridge, 1954).

> [p. 4] . . . Chinese achievements which are indubitably theirs such as . . . the earliest manufacture of cast iron.

> [p. 93] Though some authorities believe that iron became known in China as early as the 8th century B.C. (Jansé thinks *ca.* 685 B.C.), the generally accepted date for the first reference to it is 513 B.C. though even this is considered a little too early by others. In any case there can be no doubt that its use began and quickly spread about the middle of the Chou period or somewhat before, and it seems therefore probable that it was one of the most important factors in disintegrating early Chou feudalism, and favouring the rise of independent States.

> [p. 99] The appearance of iron among the Chinese feudal states, at about 600 B.C., was of late Hallstatt time, and indeed the latest appearance of iron in any of the great culture-areas. In spite of this fact we shall see below (Sect. 36) how rapidly the Chinese surpassed all other parts of the world in iron technology.

> [p. 241] Certain successes of Chinese culture, such as the early mastery of cast iron, may well have been due to the nature of the ores employed, permitting fusion at temperatures lower than those possible elsewhere.

One of the latest dates given for the ending of the Bronze Age in China is by E. T. C. Werner,[1] sometime H.B.M. Consul at Foochow, who states as follows:

> In Han times (from 206 B.C.) the Iron Age had hardly begun. The Bronze Age, as far as weapons are concerned, came to an end in the time of Chin and Wei dynasties (A.D. 265–550).

Mr. Werner was a sinologue of high repute, and was the author of *Descriptive Sociology*—Chinese (Part IX of Herbert Spencer's series) "the first work to present the phenomena of Chinese civilization in a complete and scientific form."

[1] E. T. C. Werner: *Chinese Weapons* (Royal Asiatic Society, Shanghai, 1932) p. 4.

ARCHAEOLOGICAL WORK IN CHINA

THIS SUBJECT cannot be dealt with at all adequately, because the information that comes from China is very meagre and nebulous. Yet enough news comes through to reveal that a great deal of activity is taking place in the matter of excavation and research, and there are rumours of a fabulous amount of recently excavated material which it may take years to examine and classify. In China there are archaeological publications, but Westerners not living in China have difficulty in obtaining copies, or even to hear the names of such publications. A Chinese bulletin issued in Formosa in 1950,[1] and only recently brought to the notice of this writer, contains at least two articles bearing upon themes relevant to the subject of this book. One is an article in Chinese by Dr. Li Chi, "Typological Studies of the Bronze Kou-ping (Chinese Halberd)," which is a parallel to the type-sequence study of the Shang Ko (halberd) which Dr. James M. Menzies prepared for his doctoral thesis in 1942, on the basis of the halberd collection in the Royal Ontario Museum.

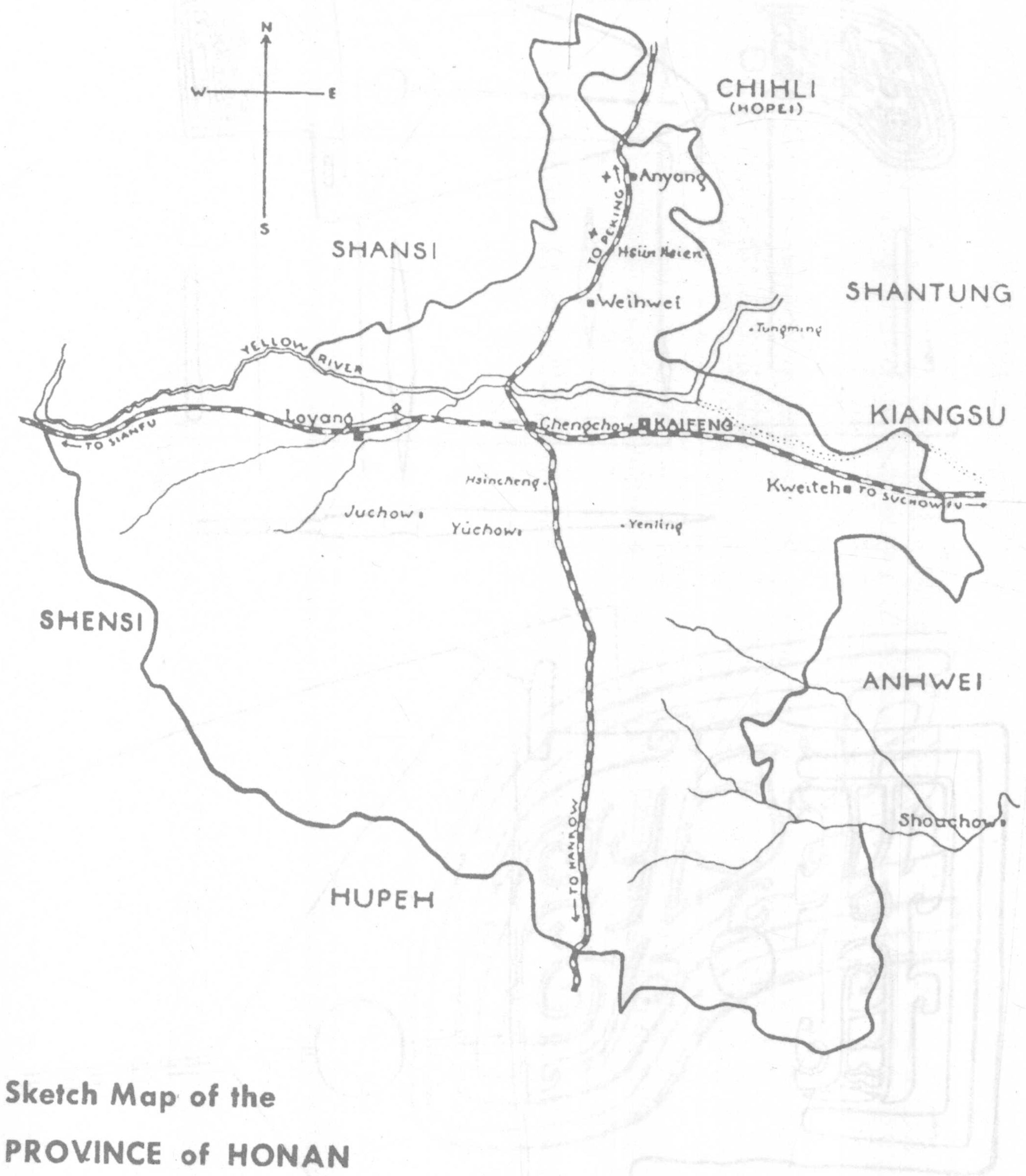
The other is an extensive article, also in Chinese, by Shih Chang-ju on "Yin (Shang) weapons in Sets excavated from Hsiao-t'un" (Anyang). This article is illustrated with sketches and plates showing various objects *in situ* as revealed by the excavations. These illustrations corroborate in a remarkable degree the objects listed as from the Elephant Tomb, so much so as to make it seem likely that the objects of Group I have come from the excavation illustrated. There were great numbers of knives in both groupings of the same types and designs. Halberds, both of jade and bronze, and many plaques of great variety were common to both, while the fact that each group had five of the striking bow-shaped bronze jingles (Fu) is significant. There were jade and white stone and mother-of-pearl objects, including jade disks and arrow-points; and a few of the graphs on bronzes are common to both groups, so far as we can learn.

Mr. Shih's article assumes that the bow-shaped bronze jingles (Fu) were attached to the central handle of the bow, which is also called Fu, but careful examination of the illustrations does not reveal any contact of the jingles with broken parts of bows—they are isolated or in contact with knives. Some of these jingles are of a slender delicate type, which if attached to the bow could not fail to be damaged in the stringing and unstringing of the tough and powerful composite bow, which is the type of bow seen in the illustrations.

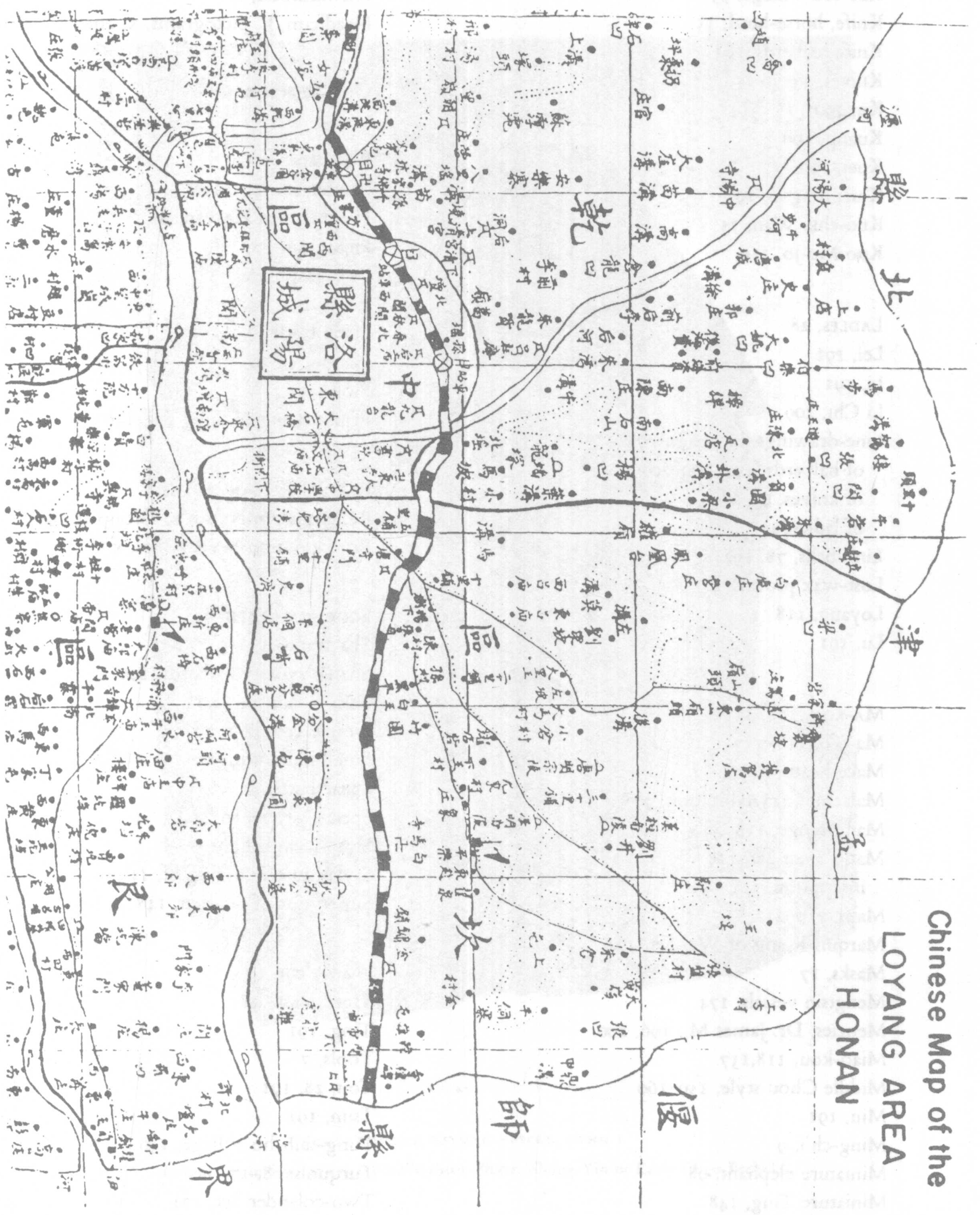
Moreover the arc part of the jingle, which is said to be attached to the central handle of the bow for the hand to grasp, is usually occupied with design in high relief, and the protruding horns of K'uei dragons and other such designs could not but hinder greatly the pressure of the extended left hand when the bow was drawn. Some of the jingles are large and heavy, measuring over three inches across the central zone which would supposedly be grasped by the left hand; and a dead weight of three pounds or so at that point on the bow could hardly make for accuracy of aim. We cannot but conclude that the explanation of these interesting objects is still to be looked for.

[1] *Bulletin of the Institute of History and Philology* (Academia Sinica, Taiwan, China), Vol. XXII, pp. 19–84, 1950.

MAPS

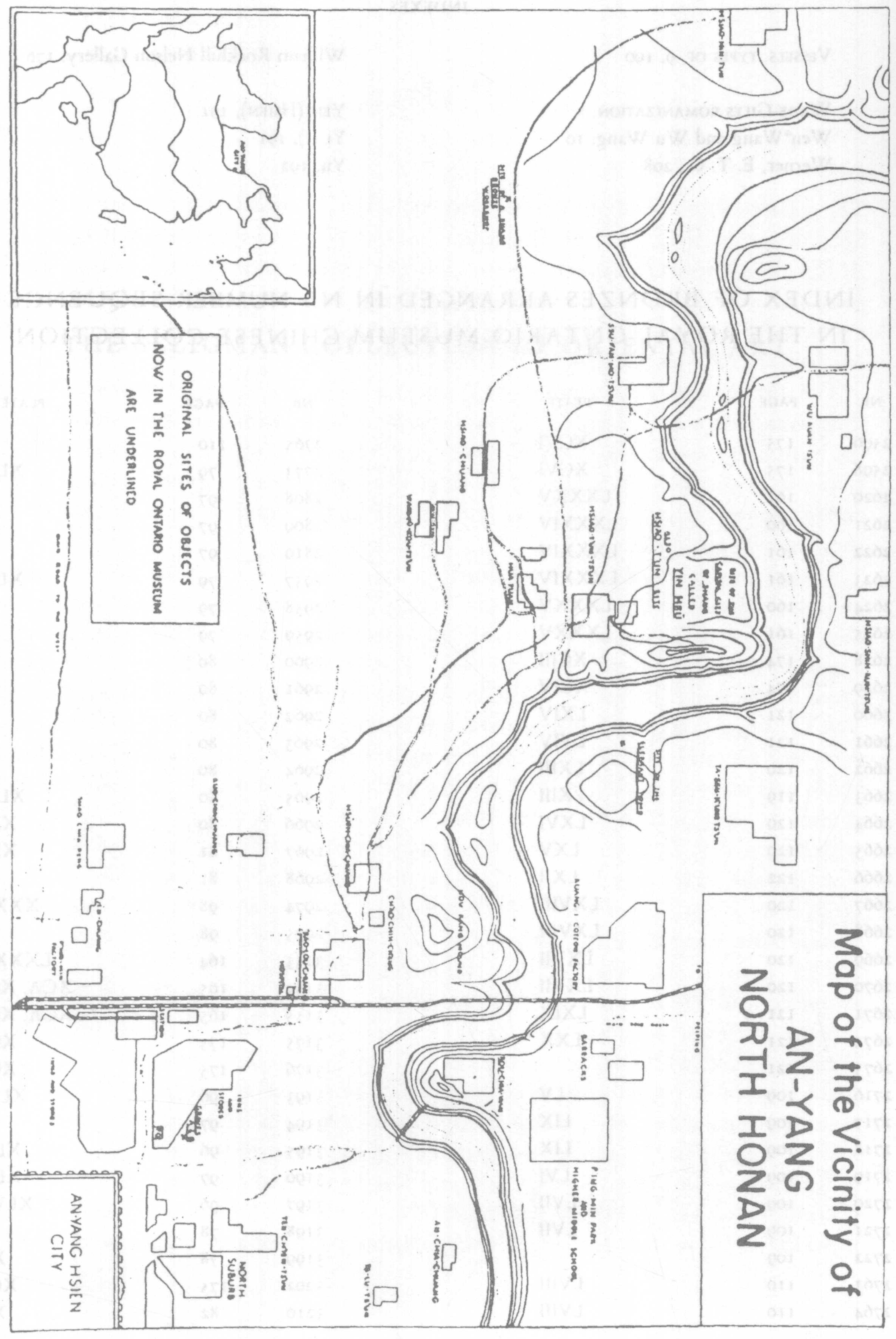


MAP A



Chinese Map of the LOYANG AREA HONAN

MAP C



Map of the Vicinity of AN-YANG NORTH HONAN

MAP B

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THE SELIGMAN COLLECTION OF ORIENTAL ART



A1

RECTANGULAR RITUAL VESSEL, FANG I

Height 10½ inches (27 cm.) First Stylistic Phase. Shang-Yin or Early Chou Period.

The Seligman Collection of Oriental Art

VOLUME I

Chinese, Central Asian and Luristān Bronzes and Chinese Jades and Sculptures

BY

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PLATES

Preface

The collection described in this book was formed by the late Professor Charles Gabriel Seligman, M.D., F.R.S., and Mrs Seligman, and was begun more than forty years ago. At first their interest in Chinese art was directed towards ceramics and, as anthropologists, particularly towards those showing foreign influence, such as may be seen in many of the T'ang tomb figures. The ceramics are the subject of a further volume by Mr John Ayers which is now in preparation.

The first bronze – the tripod cauldron, A.8 – was acquired when scarcely anything was known in this country about Chinese bronzes, and from then onward these, the most important relics of Chinese antiquity, claimed a large share of their interest. Like many young collectors of those days, the Seligmans received much help and encouragement from R. L. Hobson and George Eumorfopoulos, and this they always recalled with gratitude.

Among Professor Seligman's publications were several on Chinese archaeology and on culture contacts between East and West. The first was *Bird Chariots and Socketed Celts in Europe and China* in the *Journal of the Royal Anthropological Institute*, Vol.L (1920), a subject to which he returned later with *Further Note on Bird Chariots in Europe and China* in the same journal, Vol.LVIII (1928), and *Chinese Socketed Celts* in *Antiquity*, Vol.XII (1938). His most important contribution to Far Eastern archaeology, however, was his study of Chinese glass. For some years he had been collecting Chinese beads and other glass objects, and he now published, with others, the results of their studies: in 1934, with H. C. Beck, *Barium in Ancient Glass* in *Nature*, Vol.133; in 1936, with Beck and P. D. Ritchie, *Early Chinese Glass from Pre-Han to T'ang Times* in *Nature*, Vol.138; and again with Beck, *Far Eastern Glass: Some Western Origins* in the *Bulletin of the Museum of Far Eastern Antiquities*, Stockholm, No.10, in 1938. His last paper, *Early Chinese Glass*, was published posthumously in *Transactions of the Oriental Ceramic Society*, Vol.18 (1940–1). The whole of the collection of Chinese glass and some of the corresponding jades are now in the British Museum.

Since Professor Seligman's death in September 1940, Mrs Seligman has moved from her house in Oxfordshire to a smaller one in London, and has only retained the more important pieces and those groups which appeal to her most for aesthetic reasons. She has, however, made many striking additions in recent years, and these include some of the noblest of the bronzes and the finest of the jades, some of them well known to the public through her generous loans to exhibitions. Hence, while the collection does not pretend to represent all the important branches of Chinese art, it includes within the range covered many objects of exceptional quality and interest.

The preparation of this volume has been in the expert hands of Professor Hansford, who has not only written the introductory essay and the individual entries for each piece, but has devoted many hours to the practical problems of photography and the lay-out of the plates.

Valuable contributions have also been made, in their respective spheres, by the Fine Art Engravers Ltd and Messrs A. Percival and Co. who undertook the photography, the Ganymed Press Ltd who made the collotype plates, Miss Ann Campling who read the proofs, and Mr S. W. Lunt who drew the maps of China and South-West Asia. The map of the An-yang site is reprinted by courtesy of the China Society from Professor Hansford's paper, *A Visit to An-yang*.

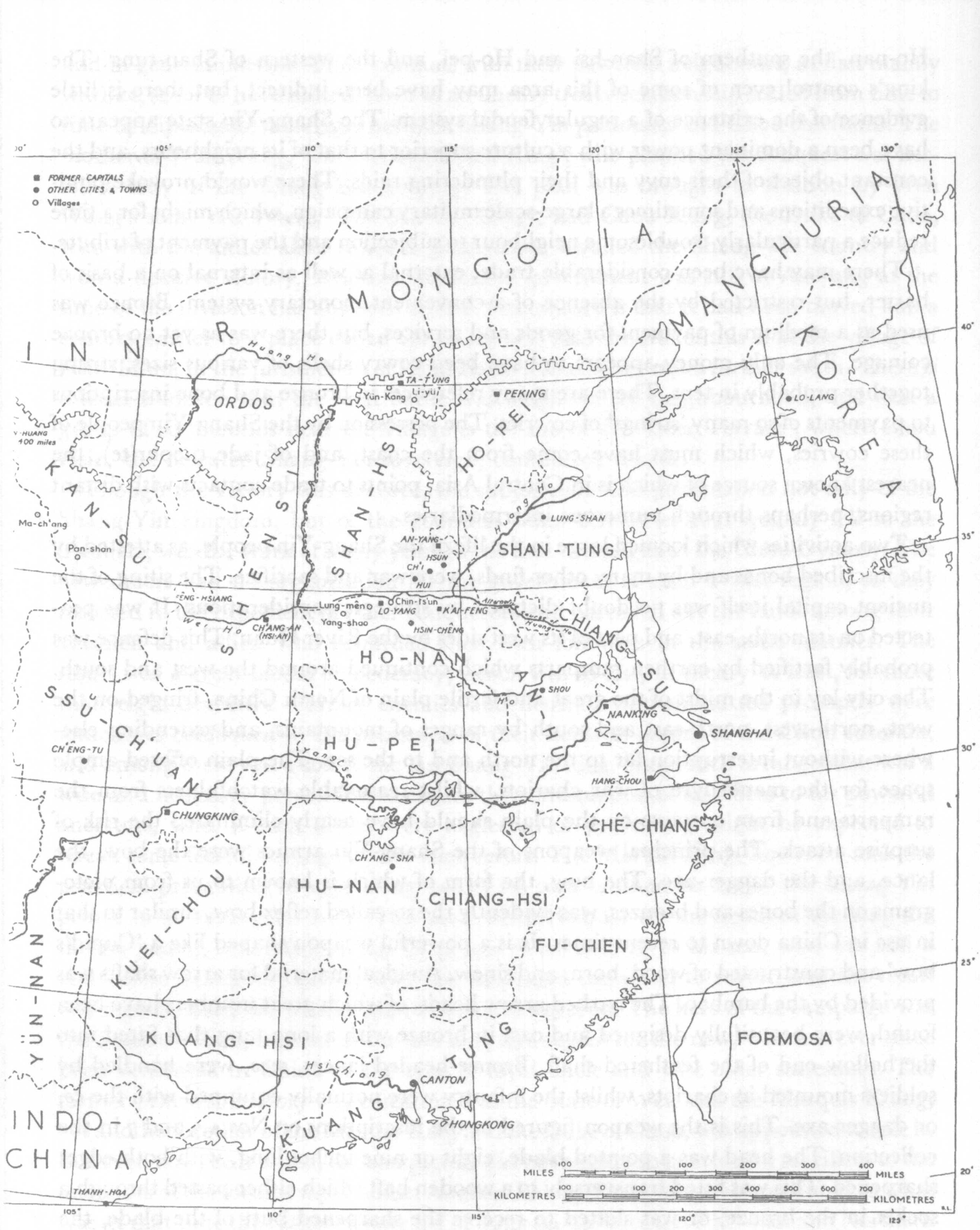
PHILIP JAMES

AUTHOR'S NOTE

I wish to express my thanks for facilities given me by Mrs Seligman for the preparation of the catalogue. My many visits to the collection in her home have been a great and constant source of pleasure. While the collection was in Oxfordshire, a card-index with descriptive notes was prepared by the owners and was elaborated and completed up to the year 1940 by Dr William Cohn. This was kindly placed at my disposal and considerably lightened my task. I should also like to record my gratitude to Professor W. Perceval Yetts, whose advice has been made freely available to me, whenever I have sought it. I must make clear, however, that I alone am responsible for the information given and for the views set forth on the many controversial issues raised.

The short bibliography, arranged under subject headings, comprises writings by Western authors, mostly in English, that are recommended to the general reader who may wish to pursue his study of Chinese antiquities further. The books and periodicals listed may be found in most large libraries in Great Britain and America. In the introductory chapters items in the bibliography are indicated by numbers in heavy type. In the catalogue section they are referred to by author and title, as are many other writings, including some in Chinese and Japanese, which are less accessible and are mainly of interest to the specialist. Chinese characters for most of the technical and conventional terms, when not included in the text, will be found in my *Glossary of Chinese Art and Archaeology*.

S. H. H.
July 1956



Map of China showing archaeological sites and ancient capitals.

PRINCIPAL CHINESE DYNASTIES

THE THREE DYNASTIES

Hsia	*(legendary)*
Shang-Yin	*c.*1550–*c.*1025 B.C.
Chou	*c.*1025–249 B.C.
Ch'in	221–207 B.C.
Former Han	202 B.C.–A.D.8
Hsin	A.D.8–23
Later Han	25–220

THE THREE KINGDOMS

Wei, Shu-Han and Wu	221–280

THE SIX DYNASTIES

Wu, Chin, Liu Sung, Southern Ch'i, Liang and Ch'ên	222–589

During the period of partition between 386 and 589 North China was ruled by the Northern, Eastern and Western Wei, the Northern Ch'i and the Northern Chou Dynasties

Sui	581–618
T'ang	618–907
The Five Dynasties	907–960
Northern Sung	960–1127
Southern Sung	1127–1279
Yüan	1260–1368
Ming	1368–1644
Ch'ing	1644–1912

STYLISTIC PHASES OF ANCIENT BRONZE DESIGN

The First Phase was current until about 900 B.C.

The Second Phase was current until about 600 B.C.

The Third Phase was current until the end of the feudal age, marked by the establishment of the Ch'in empire in 221 B.C.

CHINESE BRONZES

The ritual bronzes are by far the most important material remains of ancient China, whether regarded as works of art or as historical documents. They occupy a place in Chinese archaeology comparable to that of architecture and sculpture in the archaeology of Greece and Rome. The ancient Chinese built with perishable materials, so that few vestiges of their architecture remain, and though some remarkable sculptured stone figures dating from the second millennium B.C. were excavated under scientific control in 1934 and 1935, there is as yet no evidence that the practice of sculpture was widespread in China before the Christian era.

The earliest Chinese civilization revealed by controlled excavation, however, is not only of a bronze-using people, but of one possessing tools, weapons and splendid ceremonial vessels, whose designs and craftsmanship are the admiration of present-day bronze casters in Europe and America. This people, and the Chinese who were to follow them for many centuries to come, used their ritual bronzes as vehicles of inscriptions, and these have resisted the assaults of time and survive in great numbers as contemporary evidence of the development of the script and as religious and historical records. Study of the inscriptions in relation to the forms and decoration of the vessels, moreover, has established criteria for the approximate dating of the bronzes themselves and for the chronological sequence of their designs.

It is hardly possible at present to suggest an approximate date for the beginning of the Bronze Age in China. The earliest evidence for the use of the metal comes from sites of the Shang Dynasty, otherwise known as the Yin Dynasty. Until recently the only known ones were those of the dynastic capital and burial grounds near An-yang, occupied from the thirteenth to the eleventh century B.C. and the source of very accomplished examples of bronze-casting, the products of an age in which the art was flowering in full maturity. As these words are being written preliminary reports are appearing in official publications of the Peking Government of the discovery and exploration of other Shang-Yin settlements, some almost certainly earlier in date than those hitherto known. The most numerous and important are beneath and around the city of Chêng Chou, more than a hundred miles south of An-yang, and this may well prove to be the site of an earlier Shang-Yin capital.

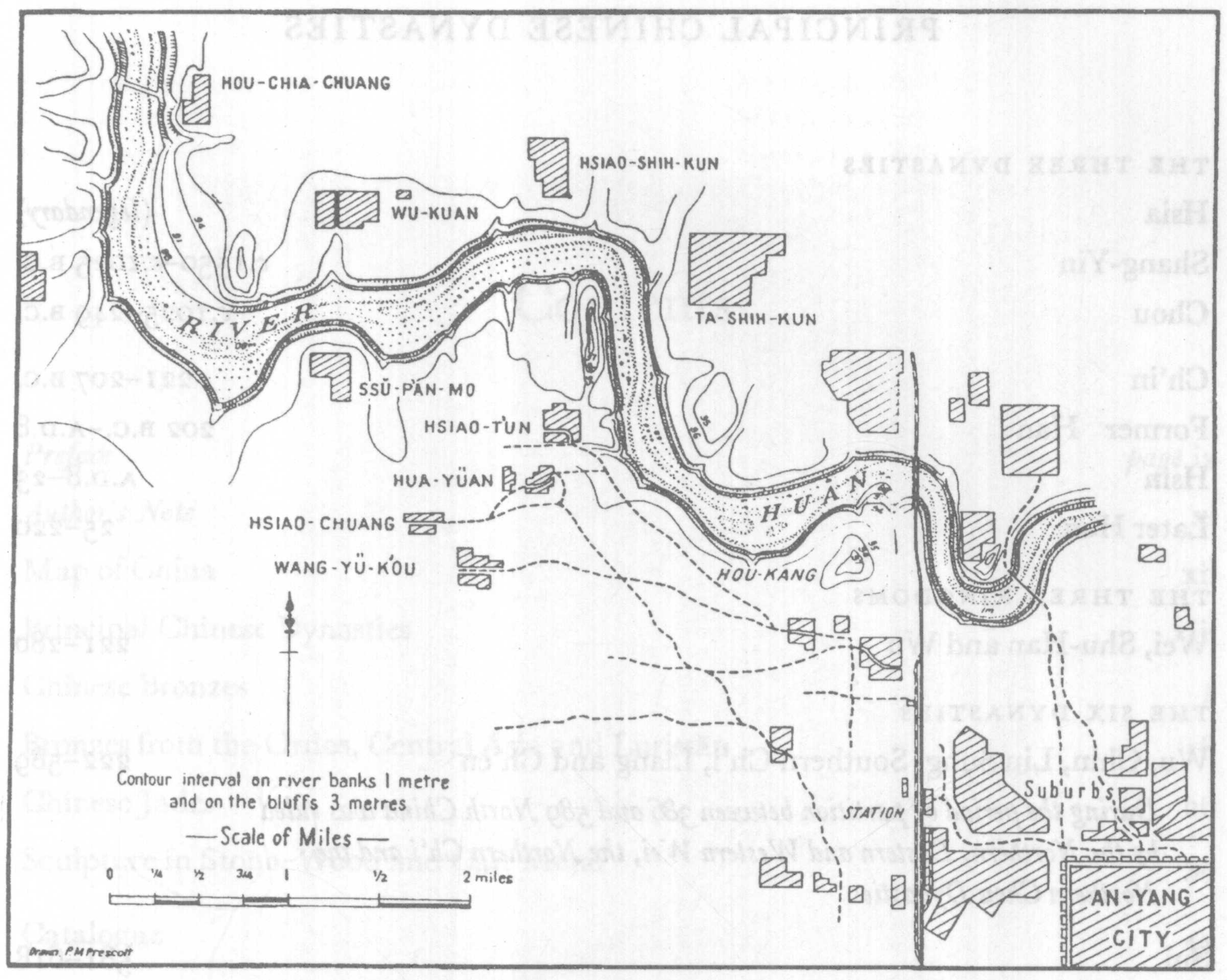
China is potentially the richest field in the world for archaeological exploration, but little had been attempted prior to the large-scale enterprise at An-yang between 1928 and 1936. This was undertaken by the National Research Institute of History and Philology, Academia Sinica, with the support of the Freer Gallery of Art, Smithsonian Institution, Washington, and the results surpassed their most sanguine expectations.

An-yang is a walled city of some 80,000 inhabitants, a *hsien* city or county town

situated near the northern border of Ho-nan Province. About four miles to the northwest lies the village of Hsiao-t'un on a peninsula, several square miles in area, formed by a bend of the River Huan. According to a long tradition this piece of country, known as Yin Hsü, 'the ruins of Yin', was the site of an ancient city, and from time to time through the centuries ancient bronzes had been unearthed in the neighbourhood by farmers and grave robbers. Towards the end of the last century curious fragments of old bone began to come to light, turned up by farmers in the course of ploughing. The farmers used to sell them as 'dragon bones' to drug shops, where they were ground up for use as medicine. In 1899 some of these bones, inscribed with what looked like ancient characters, came to the notice of an antique dealer, who offered them to various collectors and scholars. They were eagerly bought, and the publication of the inscriptions a few years later caused a sensation, since very little material had previously existed for the study of such an early phase of the Chinese script as was here disclosed. The inscriptions, which are incised on portions of the shoulder-blades and leg bones of oxen and more rarely on tortoise-shells, are for the most part oracular sentences, recording questions addressed to, and sometimes the replies received from, the spirits of dead ancestors. Small oval pits were cut in the bone or shell, and to one of these the diviner applied a heated rod; the resulting cracks determined the answer to the enquiry. Guidance was sought by this method of divination on a variety of subjects, such as war, hunting and journeys, the conduct of sacrifices, weather and crop prospects, sickness and recovery. There is now a large literature on the oracular sentences, nearly all of it in Chinese. Of Western scholars the pioneers in the study of the inscriptions on bone and tortoise-shell were F. H. Chalfant and L. C. Hopkins.

The excavations confirmed that the peninsula was indeed the site of a great city, a capital of the Shang-Yin Dynasty and the centre of an advanced bronze-using civilization with a rich material culture. Thousands more of the oracle bones were discovered, and their inscriptions, together with those previously collected and recorded, revealed the existence of a highly developed ideographic language, the characters of which can, more often than not, be equated with those of modern Chinese. The An-yang script, like the craft of bronze casting, was clearly the product of a long period of evolution, but how and where that evolution took place is another question that awaits an answer. North of the river and east of the village of Hou-chia-chuang lay the ancient burial grounds, and to these the excavators turned their attention from 1934 onward, to two areas known as the Western Tombs, nearest the village and including those believed to belong to the ruling family, and the Eastern Tombs. It is from the excavations north of the river that most of the bronzes and other works of art have come.

The numerous bronzes and the few sculptures in stone are almost the only works of the Shang-Yin people that have come down to us whole and undamaged. Even the majority of the inscribed bones are no more than fragments. But both the bones and the other finds excavated at the sites of the city and the tombs bear witness to the richness and complexity of the Shang-Yin culture. There were remains of great buildings resting on raised terraces of beaten earth and vestiges of painting and carving in



Site of the capital of the Shang-Yin Dynasty, near An-Yang

wood, bone, horn, and shell. Several kinds of pottery were made, including the beautiful white ware with carved designs resembling those of the bronzes. The difficult craft of jade carving was practised with success, though the Shang-Yin jades are mostly gems and small ornaments for attachment to clothing or other material that has long ago perished, so that it is rarely possible to determine how those carvings were used.

The Shang-Yin were a settled agricultural, cattle-raising, and town-dwelling people. They were great hunters too, and their territory was rich in animal life of many kinds. They had domesticated the dog, horse, pig, ox, water-buffalo, sheep and goat, and probably the deer, the monkey and the elephant. They possessed wheeled vehicles including chariots with splendid bronze fittings and harness ornaments. The state was ruled by a monarchy in which the succession passed from elder brother to younger brother, before descending to the next generation. The names and order of the sovereigns are recorded in Chinese history, and have now been confirmed by inscriptions on the bones. The extent of the territory over which they exercised effective control is a matter of much doubt. It probably varied from reign to reign, but never comprised more than a small portion of modern China – the northern parts of

Ho-nan, the southern of Shan-hsi and Ho-pei, and the western of Shan-tung. The king's control even of some of this area may have been indirect, but there is little evidence of the existence of a regular feudal system. The Shang-Yin state appears to have been a dominant power with a culture superior to that of its neighbours, and the constant object of their envy and their plundering raids. These would provoke punitive expeditions and sometimes a large-scale military campaign, which might for a time reduce a particularly troublesome neighbour to subjection and the payment of tribute.

There may have been considerable trade, external as well as internal on a basis of barter, but restricted by the absence of a convenient monetary system. Bronze was used as a medium of payment for goods and services, but there was as yet no bronze coinage. The only money appears to have been cowry shells of various sizes, strung together probably in tens. There are many references in bronze and bone inscriptions to payments of so many 'strings' of cowries. The possession by the Shang-Yin people of these cowries, which must have come from the coast, and of jade (nephrite), the nearest known source of which is in Central Asia, points to trade contacts with distant regions, perhaps through numerous intermediaries.

Two activities which loomed large in the life of the Shang-Yin people, as attested by the inscribed bones and by many other finds, were war and sacrifice. The siting of the ancient capital itself was no doubt dictated by strategic considerations. It was protected on its north, east, and part of its west sides by the River Huan. This defence was probably fortified by earthen ramparts which continued around the west and south. The city lay in the midst of the great and fertile plain of North China, fringed on the west, north-west, north-east and south by ranges of mountains, and extending elsewhere without interruption far to the north and to the sea. The plain offered ample space for the manoeuvre of war chariots, whilst reasonable watchfulness from the ramparts and from outposts on the plain should have nearly eliminated the risk of surprise attack. The principal weapons of the Shang-Yin armies were the bow, the lance, and the dagger-axe. The bow, the form of which is known to us from pictograms on the bones and bronzes, was evidently the so-called reflex bow, similar to that in use in China down to recent times. It is a powerful weapon shaped like a 'Cupid's bow' and constructed of wood, horn, and sinew. An ideal material for arrow shafts was provided by the bamboo. The barbed arrow heads, of which great numbers have been found, were beautifully designed and cast in bronze with a long tang that fitted into the hollow end of the feathered shaft. Bronze-headed lances, *mao*, were handled by soldiers mounted in chariots, whilst the infantry were normally equipped with the *ko*, or dagger-axe. This is the weapon figured in the inscriptions on Nos. A.3 and 7 in the collection. The head was a pointed blade, eight or nine inches long, with both edges sharpened. This was fitted transversely to a wooden haft which either passed through a socket in the bronze, or was slotted to receive the sharpened butt of the blade, the whole being held in position by a wedge, and in some cases a thong. The blade of a *ko* designed to be fitted and thonged in this manner may be seen in A.19.

Defensive armour appears not to have been highly developed but may have given adequate protection against such weapons as the enemy possessed. Bronze helmets

were worn, but the only survivals of what may have been body armour are large numbers of rectangular bone plaques with a perforation at each corner by which they could have been sewn onto clothing.

Apart from defensive operations the oracular sentences include many enquiries regarding military expeditions and campaigns, such as whether the day is opportune for launching a campaign, or whether 'aid will be received' from the spirits. There are references to raising forces of 3000 men, occasionally as many as 5000, or as few as 1000, and many allusions to the capture of prisoners (4, 155).

The most unpleasant feature of life at the Shang-Yin capital, as revealed by the finds, was the practice of blood sacrifice, both human and animal, on a truly stupendous scale. The principal objects of worship appear to have been the ancestors of royal and other leading families, though gods of the forces of nature and of local features like the River Huan were similarly honoured. Sacrifice began, no doubt, as a simple act of providing food for the dead, a custom which has persisted in China down to modern times. Regular worship accompanied by such offerings would have taken place at temples in the city and at shrines in palaces and private houses. Bronze vessels would have been conspicuous in this ritual, and many early bronzes, like A.2, 3, 5 and 8, are dedicated by inscription to a particular ancestor or elder. The ancestor or elder is never named, his name being evidently *taboo*. He is designated by one of the 'Ten Stems', names of the days in a ten-day week on which it was proper or most effective to offer him sacrifice. Such temple names have been likened to 'Father Monday' or 'Elder Brother Tuesday', the terms 'father', 'elder brother', and so on, being of the nature of titles rather than precise indications of family relationship. The sacrifice was, however, something much more than an act of thanksgiving or remembrance, for ancestors were conceived of as powerful beings able to grant or withhold blessings from their families according to the regularity and generosity of the offerings received. These offerings would have consisted of flesh, probably of cereals, and of some fermented liquor usually referred to as wine, though the grape was unknown in China until nearly 1000 years later. The food and drink were not, of course, expected to be visibly consumed by the spirits, who were supposed to be comforted and nourished by some subtle essence imparted by them, or possibly by the aroma of the cooked meat and heated wine, but it may be that the food and drink were subsequently consumed by the worshippers, who thus participated in a kind of communion with the spirits. Animals were perhaps ceremonially slaughtered for these sacrifices, but not, I believe, men and women, since there is no reason to suppose that the Shang-Yin people were cannibals, or credited their ancestors with cannibalistic practices.

The orgies of human sacrifice took place on the occasion of princely funerals at the great necropolis beyond the river. From early historical times the Chinese believed that kings and nobles each possessed two souls, both during life and after death. The inferior and more material of the two was closely associated with the body in life, especially with the blood; at death it became a *kuei*, a ghost, hovering in and about the tomb with needs closely reflecting those of the living man. The superior, more ideal

soul corresponded to the loftier parts of the personality. It was capable of leaving the body even during life, as in dreams and trances. At death this soul became a *shên*, spirit, dwelling on high with the *shên* of his ancestors, but constantly concerned with the affairs of the family, his presence being symbolized by his tablet in the ancestral shrine. The *kuei* was potentially mischievous, the *shên* potentially beneficent. The one must be placated and the other delighted by dutiful and appropriate offerings if the family was to prosper and endure. From the discoveries at An-yang it seems probable that these ideas had crystallized or were in process of crystallization in the proto-historical period of the Shang-Yin Dynasty. All the 'royal tombs', great square pits with avenues of entry from each of the four sides (see page 46) had been broken into and robbed long before, perhaps within a few centuries of their construction. The royal bodies were no longer in their burial chambers, but a large part of the treasure interred with them was intact. It included many splendid ritual bronzes to hold food and wine, in some cases perhaps the very ones used by the dead man for offerings to his own ancestors, others maybe commissioned and cast specially for the funeral, for to judge by later Chinese practice, the preparations would not have been hurried. Beautiful ceremonial weapons and fittings of bronze and jade, the bronzes sometimes richly inlaid with turquoise, sculptures in stone and vestiges of mats with painted designs were found, but all these must have been but a fraction of the countless objects of use and luxury which had daily delighted him in his palace and were to continue to solace him in his tomb. Such a prince would, of course, have required a retinue, and it is probable that his wives and some of his officers of state were among those selected for this honour. What is certain is that hundreds of persons were slaughtered by decapitation or simple inhumation and buried in and around the tomb. Apart from the palace, the kennels and stables were required to provide their quota of attendants. In some cases nine pits had been dug, one below the burial chamber and two at each corner of the square pit. In each pit were found the skeletons of a man and a dog. Elsewhere chariots, complete with charioteers and teams of harnessed horses, had been interred. Since the menial and heavy labour of the city was probably performed by enslaved prisoners of war, these would have provided most of the sacrificial victims. There are references in the bone inscriptions to expeditions sent out for the purpose of capturing barbarians, and it has been suggested that these were undertaken for the special purpose of providing victims for sacrifice. It seems more likely, however, that the expeditions were simply slave raids, the more necessary no doubt on account of the frequent and wholesale destruction of human life at the great funerals.

Among the 'barbarian' neighbours of the Shang-Yin people was one tribe destined not only to conquer them but to subdue the whole of the Yellow River basin, and to bring some sense of cultural and political unity to most of what we regard as the Chinese world. The Chou people for some centuries before the conquest had occupied a fertile territory in the basin of the River Wei in what is now the province of Shensi. Their capital lay about ten miles south of Ch'ang-an, otherwise known as Hsi-an, the present capital of the province. Whilst the Chou people seem to have been of similar racial stock to the Shang-Yin, their culture was in some respects markedly different

and in general inferior. Their contacts with their powerful neighbours, at first mainly warlike, seem to have settled down to an uneasy treaty relationship sealed from time to time by diplomatic marriages between Shang-Yin princesses and Chou chieftains. The mother of Wên Wang, 'The Accomplished King', who planned the conquest was herself a lady of the Shang-Yin nobility. The plan was brought to fruition by Wên Wang's sons, Wu Wang, 'The Martial King', and Chou Kung, the Duke of Chou, who with the aid of allies raised a great army, invaded the Shang-Yin country and won a decisive victory. Whether the seat of government was still at An-yang at the time of the invasion has not been settled. One theory is that it had been moved half a century earlier to a place called Ch'ao-ko, and that the site of this is at the village of Hsin Ts'un, in the jurisdiction of Hsün Hsien about thirty miles further south. There is a local tradition that the final battle was fought in the neighbourhood, and that a group of six mounds near the village is the site of the 'Deer Terrace', where Chou Hsin, the defeated Shang-Yin sovereign, committed suicide.

Though the victory was decisive, the subjugation and pacification not only of the Shang-Yin kingdom, but of the countless other territories that quickly fell to the invaders, was the work of many years in the first two reigns of the Chou Dynasty. The newcomers had no organization for the government of such a vast region, so they resorted to the expedient of other conquerors and parcelled out the lands among their kinsmen and allies, who rewarded their own followers in the same manner. The result was a great feudal confederacy, which was to last, in theory at least, for more than eight centuries. Former enemies and neutrals who submitted promptly were sometimes confirmed in the possession of their lands as vassals of the Chou suzerain, and among these was a son of the last Shang-Yin king. Some such arrangement was a wise and necessary precaution to ensure the continuation of sacrifices to his powerful ancestors, who, if such duties were neglected or prevented, might be expected to wreak some fearful revenge on the conquerors. The Martial King, however, took the practical precaution of appointing two of his own brothers to 'assist' the Shang-Yin prince in governing his state. This plan miscarried, for on the death of the king the throne passed, according to the Chou law of succession, to his son, who was still a child. The Shang-Yin prince with his 'assistants' conspired to revolt, and the result was a great rebellion, which took two years to suppress. The hero of the campaign was the Duke of Chou, brother of the late king and regent for the new, who has ever since been venerated in China as the type of loyal uncle and wise elder statesman. The former prince's territory was constituted as the State of Wei, and the Marquis K'ang, yet another brother of the Martial King and the Duke of Chou, was appointed to rule it. But even now, be it noted, the conquerors did not neglect to provide for sacrifices to the ancestors of the former royal house. Another Shang-Yin prince was appointed to what was at that time the rather remote fief of Sung on the borders of Ho-nan and Northern An-hui, and there the family rites were performed for a further 700 years (**4**, 227ff.)

This brief review of events at the dawn of Chinese history is a necessary preliminary to any consideration of the ritual bronzes. Prior to the discoveries at An-yang doubt had been expressed, in the West at any rate, as to whether any products of the Shang-

Yin Dynasty were extant, or indeed if the recorded names and events of the period had any historical validity. The principal traditions relative to the dynasty had been set out in the *Shih chi*, the great 'Historical Record' compiled in the second century B.C. by Ssŭ-ma Ch'ien, the father of Chinese historiography, whilst the illustrated catalogues of the Sung Dynasty showed many bronzes attributed by the authors to the Shang-Yin. But it required the extensive and costly excavations at An-yang to give the written traditions the stamp of history and to confirm the long-established Chinese criteria of attribution for the bronzes.

The discovery and excavation of the site of the Shang-Yin capital stimulated the interest of scholars in the problem of the dynastic chronology, which was already the subject of debate. The traditional or 'orthodox' chronology places the establishment of the dynasty in 1766 B.C. and its fall in 1122, and these are the dates most commonly quoted. But it is now agreed that a date about two centuries later for the first, and about a century later for the second would be near the truth. There were numerous changes of capital during the dynasty and the move to the An-yang site is believed to have taken place about 1300 B.C.

When we come to the earlier reigns of the Chou Dynasty we find ourselves better served by the written word. It is true that we have no specimens in the actual handwriting of the ancient scribes, as we have on the Shang-Yin oracle bones, fragmentary though many of them are. But the bronze inscriptions, which closely reproduce the ancient handwriting, are generally longer, sometimes running into scores and even hundreds of characters, and throw considerable light on political and social institutions. Occasionally they refer to persons and events known to the 'Historical Record'. They are supplemented by a limited number of documents in the collection known as the *Shu ching*, the Confucian Canon of History, the style and content of which are closely analogous to those of bronze inscriptions of the first half of the dynasty, i.e. down to about the year 600 B.C., and are certainly contemporary. So too are many of the hymns and lyrics of the *Shih ching*, the Canon of Poetry. The earliest limit of exact chronology was placed by the author of the 'Historical Record' at the year 841 B.C., and his judgement is still accepted. In 770 the Chou court moved eastward from its former capital in the present province of Shensi to Lo-yang in Ho-nan, and from that date the dynasty is known as the Eastern Chou.

Unfortunately very little confirmation of the written records has been furnished by field archaeology. Only one Chou Dynasty site had been officially and extensively explored before the Second World War. This was a group of tombs at Hsin Ts'un (Hsün Hsien), already mentioned as the probable site of Ch'ao-ko, where the Shang-Yin forces made their last stand, and where the Marquis K'ang was enfeoffed with the State of Wei. The tombs were Wei tombs, more than eighty in all, of which ten were comparable in size to the Royal Tombs at An-yang, and were believed to be those of the ruling family. The main difference in their construction was that the square pits had only two, instead of four, avenues of approach, one each on the north and south.

To judge from an illustrated descriptive catalogue of the Hsün Hsien bronzes, compiled in 1937 by Sun Hai-po, some are hardly distinguishable from An-yang bronzes,

while the majority show notable developments in form and decoration, and some entirely new types have emerged, such as A. 15 and 16 in the collection. If we compare the Hsün Hsien bronzes most influenced by the Shang-Yin tradition, and therefore presumably the earliest, with actual products of An-yang, some decline in the quality of the casting is observable. The finest pieces, on the other hand, in which the quality is well maintained, show a certain floridity of design not paralleled in the An-yang material. The handsome cauldron A.3 is of this character, though it is not known to have come from Hsün Hsien. On the basis of criteria now generally accepted, it appears that the earliest of the Hsün Hsien bronzes date from the tenth century B.C., and few, if any, from later than the sixth, though some are certainly as late as this.

Perhaps the most interesting innovation noticed at Hsün Hsien was the *chi*, or halbert. This weapon, not known at An-yang, is a development of the *ko* by the addition of a pointed blade in prolongation of the haft, and is thus a combined spear and dagger-axe. The Hsün Hsien halberts are of bronze, but the weapon really came into its own with the introduction of iron, perhaps about 500 B.C., and by the Han period the *chi* had entirely displaced the older weapon.

At Ch'i Hsien, thirty miles south-west of Hsün Hsien but still within the territory of the ancient State of Wei, a large grave of Late Chou date was excavated. It contained many bronze vessels and other objects including a complete chime of fourteen bells similar to A.24 and so confirming that a set actually consisted of this number.

Since the war excavations producing Chou Dynasty bronzes have been carried out under the auspices of the Peking Government at Hui Hsien (also within the ancient Wei State), near Ch'ang-an in Shensi, and near Lo-yang in Ho-nan, and these have been reported in Chinese periodicals. The government have also sponsored some further excavation on Shang-Yin sites at An-yang.

Apart from products of controlled excavation, there have been from time to time in the present century 'finds' of Chou Dynasty bronzes sufficient in numbers and interest to attract the attention of scholars. Their sources have been traced, and they have been collated and have received publicity in varying degrees. The best known of these finds are those of Li-yü in Shan-hsi, Chin-ts'un and Hsin-chêng in Ho-nan, Shou Hsien (formerly Shou Chou) in An-hui, and Ch'ang-sha in Hu-nan. The last two places were in the ancient State of Ch'u, and the finds manifest certain peculiarities in the art of this region which distinguish it from that of states nearer to the centre of the Chou confederacy. They have been made the subject of a valuable study by Orvar Karlbeck (**18**). The knife A.33, the fittings A.38, 40, 44, 49, and 51, and the mirror A.73 are of types associated with Shou Hsien.

The ritual bronzes, then, may be regarded as a kind of 'communion plate' for use in the family shrines of the ancient nobility. Some of the vessels were probably also used at banquets and other entertainments, for the Chinese have not made the clear distinction between sacred and secular usages to which we are accustomed in the West. Whatever had been the practice in the Shang-Yin Dynasty, it appears that, once the Chou confederacy was established and organized, the rank and title and standing of a

noble in the hierarchy were visibly manifested in two ways. At his investiture his feudal superior conferred on him a jade tablet of a size and shape appropriate to his rank. At the same time the superior granted him the right to use a certain number of ritual bronzes of specified kinds in his ancestral worship. The number might be increased or diminished, from time to time, as a reward or punishment, and it was understood that on such occasions the ancestors participated in the honours or the disgrace.

The bronze inscriptions are nearly always cast in intaglio, and the early ones are generally brief. They may consist of a simple dedication to an ancestor like those of A.2 and 3, or an indication of the purpose of the vessel as on A.7, or of ownership as on A.9. Most of the ritual vessels in the collection are of the Shang-Yin or Early Chou periods, and the inscriptions are of this kind. The longer inscriptions, which are not represented in the collection, are mainly products of the Chou Dynasty, especially from the ninth century B.C. onward. Some are merely an extension of the dedication, expressing the hope that 'sons and grandsons' may piously continue to perform the rites 'for a myriad years' or 'to all eternity'. But a very common purpose of an inscription is to announce to the ancestors and put on permanent record a royal charge or some gift or honour conferred on a vassal by his superior. Sometimes a bronze so inscribed is dedicated to the worship of a parent or a particular ancestor, who is thus invited to participate in the honour.

The ritual bronzes being the most important ancient remains of a people whose veneration of antiquity is proverbial, and until the discovery of the bones almost the only vehicles of inscription dating from the formative periods of their civilization, these objects have naturally attracted the keenest attention of scholars. Bronzes have been collected and studied in China for the greater part of the last 2000 years, from within a few centuries indeed of the passing of the feudal age, with its peculiar ritual and paraphernalia, and the establishment of a centralized administration in the third century B.C. Whilst the prejudice against the disturbance of graves has always been strong among cultivated Chinese, there has been no prejudice at all against the collection, study and publication of the fruits of such excavation. The interest of Chinese antiquaries has been especially directed to the early history of the script, and a great literature on this subject has grown up. The foundations were laid by the compilation of a remarkable dictionary, presented to the throne in A.D.121. This was the *Shuo wên chieh tzŭ* by Hsü Shên, a retired official of the Eastern Han Dynasty. The title has been precisely rendered by W. Perceval Yetts as 'An Explanation of Ancient Figures and an Analysis of Compound Characters' and the same author, in a valuable survey of the history of Chinese epigraphical studies, has suggested with good reason that the *Shuo wên*, as it is generally called, has been consulted more often than any other dictionary (**32**, I, 1ff.) The original compilation contained more than 9000 entry characters with brief definitions of their meanings. But, as its title indicates, its main concern was with the origin and structure of the characters rather than with semantics or with literary usage. Eight centuries after its first appearance the Emperor T'ai Tsung of the Sung Dynasty commissioned two brothers, Hsü Hsüan and Hsü Ch'ieh, to prepare a new

recension, which they submitted in the year 986. This included many editorial additions, corrections and comments which are, however, generally distinguished from the original text of Hsü Shên. Numerous editions have since been published, some with extensive commentaries, while it would be difficult to find a writing on epigraphy in the Chinese language which does not make frequent reference to the *Shuo wên*, if only to question or contradict its conclusions. As more and more material for study came to light, chiefly in the form of inscriptions on bronzes, the volume of writings on the subject increased until by the eleventh century something like a regular school of epigraphy had come into existence. After a period of neglect under the Yüan and Ming Dynasties, there was a revival under the Ch'ing, which continued through the nineteenth century and received a great impetus from the discovery and publication of the oracular sentences on bone and tortoise-shell at the beginning of the twentieth. While the much greater quantity of material available to scholars of more recent times has shown many of the conclusions of Hsü Shên and his early successors to be at fault, the reverence of epigraphists for the *Shuo wên* and its author have hardly diminished. In any discussion of an ancient character it is a common practice to begin with a reference to the *Shuo wên*.

The early epigraphists devised an efficient method of recording and exchanging information on inscriptions in bronze or stone. This was the *t'a p'ien*, or inked-squeeze, by means of which an unlimited number of accurate and durable impressions could be made of an inscription, whether in relief or intaglio. It has been suggested with reason that it was the widespread practice of making inked-squeezes that led to the early invention of printing in China. The method is still employed as the basis of reproduction in the great repertories of inscriptions published in China in recent years.

The doyen of Sung Dynasty epigraphists was the famous scholar-statesman Ou-yang Hsiu (A.D.1007–72), though he is better known as joint author of the great *Hsin T'ang shu*, 'The New History of the T'ang Dynasty', and for his many other achievements, than for his study of over 400 inscriptions in the book called *Chi ku lu*. With the closing years of the Sung Dynasty is associated the name of Tai T'ung, though the work by which he is remembered, *Liu shu ku*, 'The Six Scripts', was not printed until *c*.1320, in the fourth reign of the Yüan. An annotated translation, published by L. C. Hopkins in 1881, of the 'general introduction' to this significant work made it available to English readers. This little book was the fruit of the first serious investigation of the subject by a Western scholar. His many further contributions continued to within a year of his death in 1952 at the age of 98.

While the inked-squeeze, and subsequently the invention of printing, furnished the early epigraphists with adequate means of exchanging their material and publishing the results of their studies, it tended to concentrate such studies on the inscriptions alone with little reference to the bronzes or other vehicles and their decorative designs. But towards the end of the eleventh century there began to appear a series of catalogues of antiquities, illustrated by drawings both of the inscriptions and the objects themselves. The first of these compilations of which the text is extant is the *K'ao ku t'u*, 'Illustrated Study of Antiquities', by Lü Ta-lin, whose preface bears the date 1092.

Nine of the ten sections or chapters of the *K'ao ku t'u* are devoted to the bronzes, and one to jades. The author illustrated objects from about forty named collections, generally with some particulars of provenance and circumstances of discovery, and with comments by himself. A much larger compilation is the *Hsüan-ho po ku t'u lu*, the great illustrated catalogue of more than 500 bronzes in the imperial collection of the Hsüan-ho period (1119–25). This was compiled by an imperial commission under the presidency of Wang Fu, appointed by the Emperor Hui Tsung, himself an artist and connoisseur of note, and was completed at about the end of the reign. The title is commonly abbreviated to *Po ku t'u lu*.

No original copy of either of these, or of any other Sung catalogue, survives, but numerous editions of both have been printed in the intervening years, sometimes with the illustrations rather inaccurately re-drawn. In 1749 the Ch'ien-lung emperor ordered catalogues of his own great collections to be compiled on the model of the Sung imperial catalogue. The result was the publication of the *Hsi ch'ing ku chien*, 'Mirror of Antiquities compiled in the Imperial Palace Library', and three large supplements thereto, recording in all more than 4000 bronzes. In subsequent years the contents of many Chinese private collections have been recorded in catalogues illustrated by drawings, and reproduced by wood-block or photolithographic printing.

Until the last quarter of the nineteenth century study of the bronzes and their inscriptions was circumscribed by a respectful and uncritical acceptance of many ill-founded beliefs and dicta of the Sung epigraphists, but more independent and original approaches were made by such authors as Sun I-jang and Wu Ta-ch'êng in the eighteen-eighties and nineties, since when a new and incomparably more scientific spirit has been in evidence. The names of scholars whom the twentieth century attracted to this field are too many to enumerate, but outstanding among them have been Lo Chên-yü, Wang Kuo-wei, Jung Kêng, and Kuo Mo-jo. The Japanese, Takata Tadasuke, deserves especially honourable mention for his monumental *Ku chou pien*, an encyclopaedic dictionary of the ancient script. The most distinguished contributions of Western scholars to the study of the bronzes and their inscriptions have been those of Yetts in England and of Bernhard Karlgren in Sweden.

In the Shang-Yin period and throughout the Chou, even after the introduction of iron, bronze was a precious metal. Apart from jade there was, in fact, no material more highly prized by the ancient Chinese, and there are numerous records of kings and princes rewarding their feudal subordinates with gifts of bronze. It seems that the metal was so scarce and valuable that it was possessed only by the aristocracy, who used it to make their ornaments and ritual objects, as well as arms for their troops, while the masses continued to live in a neolithic culture. Bronze casting would surely have been a well organized and highly esteemed industry, attracting gifted artists and skilful craftsmen. No information of value is, however, to be obtained from inscriptions or from the ancient literature as to the composition of the material or the techniques employed in casting it. It is possible that at first the copper and tin bearing ores were smelted together, and probable that for centuries the alloys conformed to no generally accepted standards. Apart from copper and tin they may often have contained other

elements such as lead and zinc. For casting small objects – tools, weapons, and clothing ornaments – temporary moulds of loamy sand and permanent ones of stone or clay would have been used, and specimens of the latter have been recovered from An-yang and elsewhere. The tradition is that the more elaborate bronzes, including the ritual vessels, were cast by the much more complicated *cire perdue*, or 'waste wax' technique. This is the method that would be used in the West at the present day, and it has certainly been known to the Chinese for many centuries. The essential feature of the technique is the construction upon a clay core of a wax model identical in form and decoration with the bronze to be cast. The model is then enclosed in a clay envelope and subsequently melted out, leaving a perfect mould between core and envelope into which the molten bronze is poured. The forms and finish of many of the ancient vessels would accord with the view that this was the technique employed, and persons acquainted with its application in modern times have doubted if such masterpieces could have been produced by any other method. The *cire perdue* theory was, however, disturbed by the discovery at An-yang of large numbers of sectional moulds with the contours and decoration of familiar types of bronze ritual vessels. These were first reported and discussed in 1933 by Liu Yü-hsia in *Preliminary Reports on Excavations at An-yang* (in Chinese), IV, 688–9. The moulds are made of baked clay, the inner lining with its decorative design being of finer composition than the rest of the material, and some of the sections have projecting keys designed to fit corresponding depressions in adjacent sections and so build up a mould for a complete vessel.

It was thought at first by some that these moulds might have been used not for direct casting, but to produce wax models for the *cire perdue* process. But a systematic study of them by Orvar Karlbeck of Stockholm, published in 1935, showed conclusively that they had been used for the direct casting of the metal (**17**). On the bronzes themselves, moreover, seams may often be observed where the edges of the sections would have met, as in A.5, 6, 11 and 12, and sometimes breaks in the continuity of the decoration due to faulty apposition. These could have been corrected, or another model made, if the moulds had been used only to construct the model in wax. It thus appears that the theory that the earliest Chinese bronzes known to us were cast by the *cire perdue* method cannot be sustained, unless or until fresh evidence for it is available.

The question still remains as to what materials were used for the models from which the sectional moulds were made. Clay, dried or baked, would at once suggest itself, but for the fact that it is subject to shrinkage and distortion in the process of drying. It is possible, however, that some component was added to the clay to prevent or minimize this effect. H. J. Plenderleith believes that the models were made of wax, even if the *cire perdue* method were not employed. Yetts drew attention to a pottery vessel shaped like a bronze jar, *hu*, in the Victoria and Albert Museum, which shows evidence of having been scored with a knife when sectional moulds were cut from its surface (**32**, I.38). Such permanent models may have been used to produce a series of identical bronzes of the plainer and simpler designs. But of the finer bronze vessels, such as those in the collection, it is extremely rare to encounter two identically similar.

It would seem that for such bronzes one model, and one model only, of perishable material was made, and that this provided a single set of moulds, which was destroyed or irreparably damaged in the process of casting.

The ritual bronzes, when newly cast, would have gleamed and shone like new pennies, and if they had retained their appearance, they would surely have been much less attractive than they are to collectors of the present day. Those like A.3 in which the recessed parts of the design were filled with dark inlay of lacquer-like composition, would have produced an effect similar to that of the well-known brassware made at Moradabad, India. Burial of the bronzes in the soil of China for several millennia has in most cases produced a patination of the surface which much enhances its beauty. The effects vary widely according to the composition of the alloy and the circumstances of burial, the metal oxides producing a range of warm tones of brown and green, and more rarely blue and red. In some cases corrosion has proceeded so far as to give the object quite a rugged appearance, by no means disagreeable. This was not highly favoured in China in the last century, and such bronzes in the imperial Manchu collections, and in some others, were carefully rubbed down and waxed. Occasionally the process of corrosion continues long after the bronze has been excavated, and objects in collections are examined periodically for symptoms of so-called 'bronze disease', which can be arrested by expert treatment.

The ritual bronzes are classified according to style and according to their distinctive shapes or uses. For the first classification the system adopted here is that devised by Yetts, which recognizes three stylistic phases. It has the merit that it is not expressed in terms of historical landmarks, since changes in design and workmanship need not coincide with important events like the rise and fall of dynasties or changes of capital. Most of the vessels in the collection belong to the First Phase, which comprises the earliest bronzes known to us and was current until about 900 B.C. The Second Phase prevailed from then until the sixth century, when it was gradually succeeded, perhaps not simultaneously throughout the country, by the Third, which persisted until the end of the feudal age and the establishment of the Ch'in Empire in 221 B.C.

Vessels of the First Phase, which reached its full flowering long before the Shang-Yin Dynasty was conquered by the Chou, are characterized by a massive dignity of form and the vigorous 'animal art' of their decoration. The animal motives, which range from the naturalistic to the highly stylized, are numerous, but more remarkable than the number of beasts and birds depicted is the variety of presentation of the half-dozen or so favourites – the *k'uei* dragon, the elephant, the tiger, the deer, the hare, the pheasant, and the cicada. Of these the *k'uei* is the most conspicuous. It has many variants, but features common to them all are a large head with prominent eye and gaping jaws, a crest or horn, and, since the animal is nearly always seen in profile, what appears to be a single fore-leg. It is commonly referred to as a *k'uei lung*, *lung* meaning dragon, but it bears little resemblance to the serpentine dragon, a familiar motive of Chinese art from the Bronze Age to modern times. Good examples of the *k'uei* may be seen on A.1, 2, 4 and 10.

Of equal importance with the *k'uei* as a motive of First Phase bronze decoration is

the monstrous mask called *t'ao-t'ieh*. Indeed the mask is often composed of the bodies and detached limbs of *k'uei* dragons, as on A.1, 2, 3 and 10. Elsewhere the mask is of fierce feline or of bovine type, as on A.4, 12 and 13; more rarely it is that of an owl or is composed of pairs of confronted animals or birds. In these cases the eyes of the two creatures seen in profile serve as the eyes of the mask viewed from the front. The term *t'ao-t'ieh* was first used with reference to bronze decoration in *Lü shih ch'un ch'iu*, a miscellany attributed to the third century B.C. The author says that the *t'ao-t'ieh*, a monster with a head but no body, was depicted on cauldrons of the Chou Dynasty; that it devours men, but before it has swallowed them, is itself attacked and eaten. Thence arose the legend fostered by Sung Dynasty scholars, that the awe-inspiring masks, so conspicuous in the decoration of ancient bronzes, were placed there as a warning against greed. Their real significance remains unknown, though it has attracted much speculation. The name *t'ao-t'ieh* survives as a convenient rationalization.

The system of classification by shape and use is that devised by the Sung archaeologists more than eight centuries ago and still followed. It comprises some fifty classes. Yetts has computed that less than half are self-named, being those classes of which each is known to have at least one member inscribed with its class name. To the others the archaeologists gave names, derived from the ritual classics, which they thought had been current in antiquity. The correctness of their association of some of these names with particular classes of bronzes is questionable.

The reader will find them described, with diagrams, in my *Glossary of Chinese Art and Archaeology* (6, 3–13). Of food vessels the collection includes four cauldrons (*ting* and *li*) and three vessels for serving meat or grain (*kuei* and *fu*). Of wine vessels there are two for heating (*ho* and *chüeh*) and four for storage or pouring (*hu*, *tsun*, and *ku*). Of musical instruments there are two bells (*chung*) designed to be used in chimes. In addition there are weapons, tools, chariot fittings, and several objects of uncertain use including the splendid casket-shaped *fang i* illustrated as the frontispiece, and the *p'ou*, A.12, the largest vessel in the collection.

In the Second Phase several distinctive classes of vessel, such as the rectangular *ting*, the *li*, and the *chüeh*, disappeared, and others underwent a modification of shape, while a number of new classes emerged. Notable among these were the *hsü* and the *fu*, A.26, oblong food vessels with covers similar in shape to the vessels themselves and recalling that of the European entrée-dish. Chimes of bells to provide musical accompaniment to the ritual were another innovation. The decoration also underwent great changes. Through our acquaintance with the motives of the First Phase we can still perceive vestiges of animal forms, but they are now so simplified and conventionalized as to be barely recognizable. The *k'uei* dragon and the *t'ao-t'ieh*, when not entirely dissolved, have lost most of their vigour and ferocity.

In the Third Phase, to which the transition was more gradual than from the First to the Second, the modification of shape is comparatively slight, but lively zoomorphic decoration is again in evidence. Sinuous, convoluted animal forms, especially of felines, serpents, and dragons, are conspicuous. Sometimes these seem to be revivals, in a modified and gentler form, of familiar motives of the First Phase. The contrast

between Second and Third Phase designs is well demonstrated by two bells, A.23 and 24, on Plate XV, while an interesting example of transition between the two phases is furnished by the jar, A.25, on the following plate.

While all authorities are agreed as to the succession of the three stylistic phases, different nomenclatures have been adopted, and attempts have been made to establish stylistic criteria for closer dating within the phases. The lack of dependable indications for distinguishing First Phase bronzes of the Shang-Yin period from those of the Early Chou is especially regretted by collectors. Nevertheless an attribution to one or other period is sometimes possible on evidence such as the known provenance of an object from a Shang-Yin or a Chou site or the content of an inscription. Occasionally a Shang-Yin or a Chou date may be inferred from that of a bronze of similar style datable on such grounds as these. It would be neither possible nor profitable in this introduction to examine and weigh the arguments for and against the various systems of classification, but four terms, which enjoy wide currency and the meaning of which is not in dispute, should be noted. What are here called the Second and Third Phases are designated by the Swedish Scholars 'Middle Chou style' and 'Huai style'. The reason for the first of these is obvious, while the second was so named because, when first located with any certainty in any definite Chinese region, it was attested in the Huai Valley by Orvar Karlbeck. Bronzes of the Second and Third Phases are designated by most Chinese writers as belonging respectively to the *Ch'un ch'iu Shih-tai*, 'Period of the Spring and Autumn Annals' and *Chan kuo Shih-tai*, 'Period of the Warring States'. The picturesqueness of these terms and the fact that they were adopted, in deference to the Chinese, for the International Exhibition of Chinese Art at the Royal Academy, London, in 1935 has recommended them to many Western collectors and writers. 'Spring and Autumn Annals' refers to the book of that name, attributed to Confucius and recording events between 722 and 481 B.C., while the 'Warring States' period is deemed to begin at one or another date between 481 and 401 and to end in 222 B.C. These terms are unsatisfactory for the reason already stated – that the stylistic phases do not coincide with these or any other historical periods. In fact the Second and Third Phases are well attested long before the beginnings of the *Ch'un ch'iu* and *Chan kuo* periods respectively, in whatever way the dates of these periods are calculated.

With the passing of the feudal age and its peculiar ceremonial, and the unification of the Chinese world under a powerful centralized government, the main occasion for the casting of bronze ritual vessels disappeared. Bronzes of the Ch'in and Han Dynasties are as a rule utilitarian. Their decoration is comparatively simple, confined generally to a few 'auspicious animals' or other luck-bringing devices, while inscriptions relate chiefly to weight or capacity, sometimes accompanied by flattering compliments or good wishes to the prospective owner. The most interesting classes of Han bronzes are the mirrors. Bronze hand-mirrors, their backs ornamented with typical Third Phase patterns, were in use during the last reigns of the Chou Dynasty, perhaps as early as the fifth century B.C. By the beginning of the Christian era their use was not only widespread, but they had acquired a great reputation as talismans. Concurrently

with the decline of the ancient feudal religion, there had arisen a host of beliefs and cults of the kind usually thought of as Taoistic – the search for the elixir of life, for the Hills of Longevity and the Isles of the Blest with their wondrous herbs, their gem-like fruits and their jade springs, and for communion with the *hsien*, immortals or fairies, who dwelt in these paradises and had power to make the adept even as one of themselves. To the Chinese of that age the mirrors were not merely adjuncts of the dressing-table: they had their own place in this complex of pseudo-religious beliefs. They were magic things, able to accumulate the light and energy they appeared to reflect, and to give it out later, as required. They were, therefore, buried with the dead to illumine the darkness of the tomb. Doubtless their power to aid the living was believed to be enhanced by auspicious devices in their decoration and by the formulae inscribed on them. A good example of a mirror with its potency thus enriched is A.61. In later times, the Six Dynasties and the T'ang, when these notions had lost some of their appeal, the mirror-backs were used to illustrate moral stories or popular folk-tales, as on A.65. The mirrors, indeed, offer in a concentrated form a wonderful repertory of Chinese art motives, as well as a record of religious ideas, covering a period of more than 1000 years.

There is one other important activity to which the skill of the Chinese bronze caster was directed in later times – the making of votive images for Buddhist and Taoist shrines and temples. The collection includes several beautiful little figures of this kind which will be more appropriately noticed in the chapter on sculpture. Two techniques in which rarer metals are combined with bronze are also represented. It has been remarked that in feudal China bronze itself was a precious metal, a medium of exchange and for the conferment of rewards. Gold and silver, though known, were so scarce as to be unsuitable for such purposes, but in the last centuries of the Chou period they were used fairly extensively for inlaying of decoration in bronze. The Chin Ts'un find included a large number of vessels and fittings embellished in this way. The most notable inlaid bronze in the collection is the short sword A.28, inscribed with its owner's name and rank, which dates from the same period or a little later. More accomplished examples of inlaying are A.44, 52 and 93.

The other metal technique appears to have been invented by the Chinese in the first half of the T'ang Dynasty. It is known as *p'ing-t'o* (Japanese *heidatsu*). Thin plates of gold and silver were cut to the required shapes, engraved, and set in a lacquer bed resting on a bronze base. The lacquer was then rubbed down and 'levelled off' with the gold and silver inlay, as the Chinese name implies. The square mirror, A.72, is a fine example of the *p'ing-t'o* technique.

BRONZES FROM THE ORDOS, CENTRAL ASIA AND LURISTĀN

The collection contains an interesting series of the small bronze objects – plaques, pendants, and other ornaments – in the animal style characteristic of the great Euro-Asiatic Steppe and of regions adjacent thereto, particularly as displayed in its local manifestation along the borders of China and Mongolia. The term 'Ordos', as applied to the bronzes from this quarter, is one of convenience, though large numbers have in fact been found in the relatively small area from which they take their name. The Ordos lies within the great, northerly loop of the Yellow River, beyond which it is bounded on the north by the Yin Mountains, on the west by the Alashan Mountains, and by loess hills on the east and south. Its boundary on the south is also marked by the present Great Wall of China, built in the fifteenth century. The region consists of rolling plain, rather less than 4000 feet above sea level: the western part is desert and scrub, but the eastern is grass and suitable for pasture. It was one of the first regions conquered by Genghis Khan in the thirteenth century. After his occupation he moved certain tribes southward into it, to act as a garrison, and these were known as Ordos-Mongols, that is Camp-Mongols; whence the name came to be applied to the region. It is, of course, cognate with the Indian Moghul word *Urdu*, the name of the official language of the Moghul Empire.

In the Chou period the Ordos country was in the hands of the barbarians, until the end of the fifth century B.C., when the habitable part of it was divided between the states of Chao and Wei. Thereafter it changed hands repeatedly, so that there was ample occasion for the mingling of the two strains, the Chinese and that of the nomad barbarians, in its art products. Nevertheless, the land not being suitable for agriculture, the inhabitants, whatever their racial origins, were inevitably occupied in horse and cattle raising, and living a more or less nomadic life, so that it was the nomad influence that prevailed.

The adoption of nomadism, the life of the roaming herdsman, seems in fact to be dependent more on environment than on race. But the Chinese proper have always shown an aversion to it, preferring a life of settled agriculture. The nomadic life is not necessarily primitive, compared with the agricultural, but it involves less sustained labour, to which the Chinese have no objection, and more of a spirit of adventure, with which the Chinese are not so well endowed. Nomads and Chinese differed essentially in temperament and mode of life, and it is not surprising that they have been intermittently in conflict throughout history.

The region of nomadism stretched across Europe and Asia from beyond the

Carpathians in the west to within 300 miles of the Pacific in the east. It is steppe-country, including both grass-land and desert, interrupted in its central part by the Pamirs, the T'ien Shan and the Altai Mountains. The nomad people throughout this area displayed aggressive instincts and notable ability as fighters, their peculiar animal art prevailed with local variations over the whole area, and the people acted as agents for the communication of art motives, and to some extent of ideas, between China and the West. It is, therefore, necessary to view the Ordos bronzes against a background of the art and culture common to the whole of the Northern Steppe.

The evidence available from both literary and archaeological sources establishes a remarkable cultural unity over the vast area occupied by these people who, to Greek and Chinese alike, were the 'northern barbarians', as well as over long periods of time. Figures portrayed on specimens of their metal-work excavated from graves of the fifth and fourth centuries B.C. in regions north of the Black Sea bear a close resemblance in physique, clothing, and equipment to some of the pottery figures of foreign grooms made in China and deposited in T'ang Dynasty graves 1000 years later. The racial unity of the nomads cannot, however, be so clearly established. The graves in South Russia have been identified with the people known to the Greeks as the Scythians, a group of tribes who occupied the territory to the north of the Black Sea from the eighth to the fourth century. Unfortunately the name Scythian has been used in Europe from classical times onward both as referring to this specific group and also in a very loose sense connoting all the peoples living at any distance to the north and north-east of Greece. So in recent times there has been a tendency to refer to the nomad culture of Eastern Siberia, Mongolia, and the Sino-Mongolian borderland as 'Scythian'. Some such term as Sino-Siberian is preferable, as being more precise and less open to controversy. The finds in South Russia and the Middle East include many objects of gold and silver, but the Sino-Siberian metal-work is confined with few exceptions to bronze.

The art of the nomads, like that of ancient China, was an animal art, but with a world of difference. Their animals are living creatures drawn from observation and vivid experience of their own flocks and herds and the wild life of the steppe and mountain. There is limited stylization, mainly such as is dictated by the need of compactness and the functions of the implements or harness fittings, for in the life of the roving herdsman there is no place for elegant household equipment or ritual vessels, and little for useless ornament. This stylization does not usually go beyond the bounds set by modern commercial art, and usually serves to emphasize rather than to obscure the character of the subject. Of domesticated animals the favourites are the elk and reindeer, the horse, the ox, and the camel. Game animals are represented by various kinds of deer, the ibex, the argali or big-horned sheep, and the wild ass. Attacks on animals by preying carnivores, especially the large felines and eagles, are common themes of nomad art, as exemplified in A.102 and 106.

The people of the steppes were great hunters as well as herdsmen, and hunting provided them with a large part of their food. It is, therefore, probable as J. G. Andersson maintained, that the representations of wild life, and particularly of

captures by preying animals, did not serve a merely ornamental purpose but were media of sympathetic magic, devised to enhance their owners' prospects of success in the chase (**33**, 272ff.) The captures may indeed depict events of organized hunting, for the nomads were adepts at the training and use of wild animals in the pursuit of big game. Andersson quotes circumstantial accounts by several nineteenth-century travellers of hunts in which eagles were used in the manner of falcons to bring down and kill deer, antelope, and even wolves. Large felines were also trained to catch game, though perhaps only in the service of the princes and nobility. Marco Polo describing Kublai Khan's great spring hunt tells us that 'the Emperor hath numbers of leopards trained to the chase, and hath also a great many lynxes taught in like manner to catch game, and which afford excellent sport. He hath also several great lions, bigger than those of Babylonia, beasts whose skins are coloured in the most beautiful way, being striped all along the sides with black, red, and white. These are trained to catch boars and wild cattle, bears, wild asses, stags, and other great or fierce beasts. And 'tis a rare sight, I can tell you, to see these lions giving chase to such beasts as I have mentioned!' (*Travels*, Yule/Cordier Edition, I, 397). The emperor's 'lions' were, of course, tigers.

Sympathetic magic may also be the inspiration of the portrayal of the mating of animals, as in A.115 and 117, in the hope of ensuring plentiful supplies of game. It may also be the occasion for the multiplication of animal forms as in A.107.

All the bronzes illustrated on Plates XLVII–L, with the exception of A.112, reached England from China, and are presumed to have been found in the Ordos region, or at least in the Mongolian borderland. Nothing is known of the circumstances of the finds, whether they come from graves or old dwelling sites, or have been handed down as heirlooms. The nomad peoples, through most of their history, have been without written languages, and their bronzes are not inscribed. Though made for the use of the people of the steppes, we do not know by whom the actual casting was done. Sir Ellis Minns believed that the animal style was evolved in more perishable materials, horn, bone and wood, textiles, leather, felt, and birch bark, but that the nomads did not work in metals themselves, their requirements in this material being supplied by slaves, tributaries and neighbours (**36**, 12). In these circumstances it is rarely possible to date Ordos bronzes with confidence. In China the traditional date of the earliest is the second half of the second century B.C. This was the time of the great and successful campaigns of the Emperor Wu of the Han Dynasty against the nomad Hsiung-nu people, when prisoners in unprecedented numbers, together with their equipment, were taken by the Chinese. Some of the bronzes are no doubt of this period or even earlier, while the majority are much later. The nomad way of life has changed little in the last 2000 years.

Quite recently, however, a chance find of buried treasure by shepherd boys in Persian Azerbaijān indicates an earlier emergence of the distinctive features of nomad art than had been suspected previously. The find was described by André Godard, Director-General of the Persian Archaeological Service, in a monograph, *Le Trésor de Ziwiyè*, Haarlem, 1950. Ziwiyè, or Ziweh, is a village twenty-five miles east of Sakkiz, in the region to the south of the Lake of Urumiya, and the treasure was found close to

the site of a Mannean fortress destroyed by Sargon II of Assyria in the eighth century B.C. The numerous objects of gold, silver, bronze, and ivory included a splendid gold pectoral and fragments of other gold plaques. Their designs incorporated a running or crouching elk, two ibex, and a feline, all treated in typically nomad style. Many of the other decorative motives and their treatment are Assyrian in character, and Godard was of the opinion that the whole find was Mannean work of the ninth century B.C.

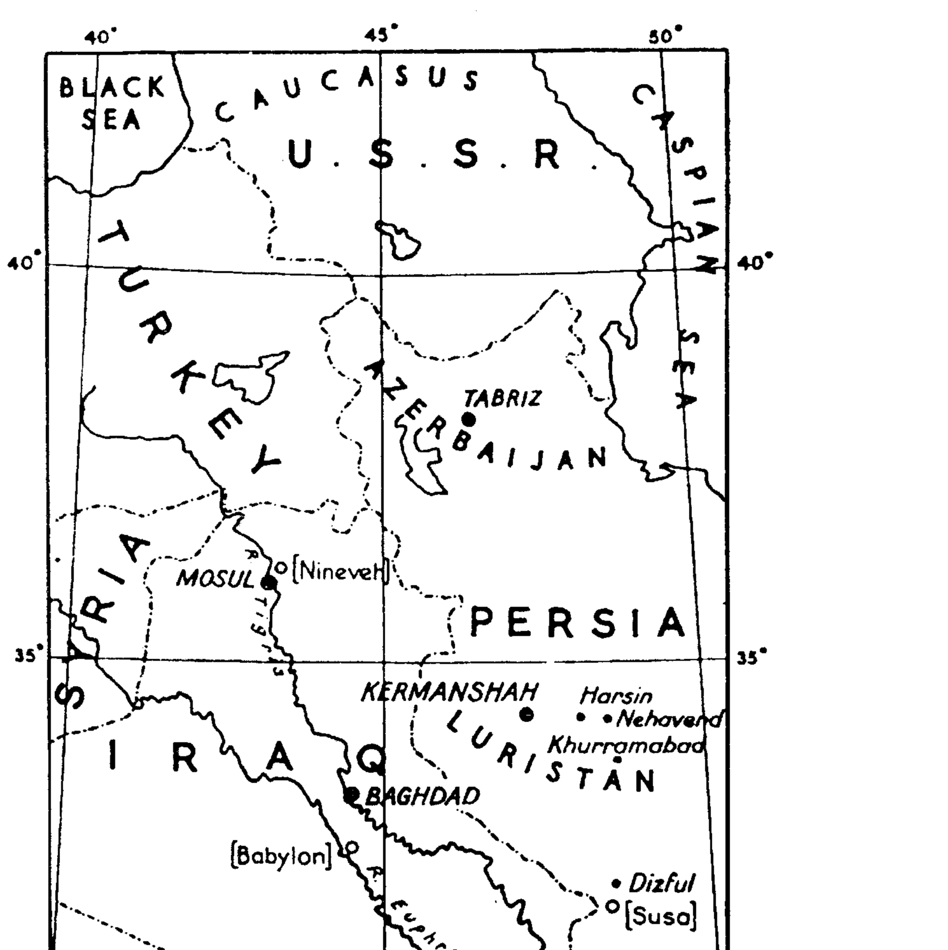
Apart from the repertoire of animals native to their own country, the nomads adopted others from the arts of their neighbours, as well as some of their peculiar methods of presentation. Certain composite and fantastic animals, such as winged gryphons with the heads of birds, lions or goats, probably came from Persia or Mesopotamia. The larger animal in A.104 is of this kind. The pig, which is not indigenous to the steppe country, may have a Chinese origin. So may the idea of the extremities of animals ending in birds' or animals' heads, as in A.106, a convention to be found in the decoration of some of the First Phase ritual bronzes.

Some treatments of animal subjects are conspicuous throughout the whole area of nomadism, and must have arisen from the special needs of the roving life. Thus the presentation of animals with their legs tucked under them, as in A.119, provided for compactness, an important consideration in clothing or harness ornaments.

In the Former Han Dynasty, and even somewhat earlier, the Chinese were compelled by the menace of the Hsiung-nu and other nomad tribes, to introduce cavalry and certain new weapons and equipment from the armoury of their enemies. These and their ornamentation were at first copied exactly, and then gradually modified to accord with Chinese needs and the Chinese spirit. An inevitable consequence was the adoption of the motives of nomad art and their application to purely Chinese articles. The appearance of hunting scenes and naturalistic animal designs, which had no immediate predecessors in Chinese art, was a notable development of the period.

While we are not here concerned with the influence of nomad art on that of the West, I feel justified in calling attention to the remarkable comparisons drawn by Minns between the Ordos bronzes and the metal-work of our Celtic and early Germanic forebears in Western Europe (**36**, 36ff.) This author noted particularly the curious curls upon the shoulders and haunches of animals, such as A.102 and 106, which are a common feature through a wide range of nomad art, and which he even suggested might have been derived from a somewhat similar feature on animals of the First Stylistic Phase of the Chinese ritual bronzes. The curls are certainly conspicuous in numerous examples of Celtic art which he cited for comparison, as well as on the deer of the famous Lullingstone Bowl in the British Museum. What is perhaps more striking is a general similarity both of spirit and treatment in the animal art of the nomads and of the Dark Ages of Western Europe which, it would seem, the arm of coincidence is hardly long enough to explain.

The small but admirable group of Luristān bronzes in the collection introduces an animal art, which arose and probably declined before the art of the steppe came to fruition, but may well be regarded as one of its ancestors. Yetts has drawn attention to parallels between the Luristān bronzes and those of the Ordos region and even of Han



LURISTAN
AND ADJACENT REGIONS

Dynasty China. A notably conspicuous feature of both is the 'attenuated feline' motive (**41**, 76). The animal occurs commonly in confronted pairs, of which A.101 from the Ordos and A.134 and 136 from Luristān are typical examples. Ancient bronzes of a distinctive style from this wild and mountainous region of western Persia first attracted attention as the result of a chance discovery of a tomb by a peasant, when working his land in the autumn of 1928. The tomb contained bronze objects which, according to a story current locally and reported by Godard, the peasant took to the neighbouring market town of Harsīn and showed to a grocer with antiquarian interests. The grocer offered to exchange the bronzes for sugar-loaves, and after a visit to the more distant city of Kermanshah, let it be known that an ample supply of sugar-loaves awaited any fortunate finders of old bronzes who cared to offer them in exchange. The new department of the grocery business prospered greatly, until the trade attracted to Harsīn antique dealers from Kermanshah, and even from Hamadan and Teheran. Some of them bought horses and ventured into the country of the Lurs, where they were

promptly set upon and relieved of their purses and property. The more prudent stayed in the safety of the town, where they were content to compete for the privilege of buying from the wily tribesmen at steadily rising prices.

The vogue for treasure-hunting developed rapidly, as the Lurs located more and more burial-grounds, and thousands of graves were opened. The finds were at first known as 'Harsīn bronzes', but as tribesmen from more remote regions to the south and east reported their discoveries and offered their finds, the name was changed to 'Luristān bronzes'.

The province of Luristān (otherwise known as Burujird) is bounded on the west by the frontier of Persia with Iraq, and on the north and south by the provinces of Kermanshah and Khuzistān respectively. It is one of the least accessible parts of the country, being composed of parallel chains of the lofty Zagros Mountains, running from north-west to south-east, and between them, generally at a high elevation, long but rather narrow valleys. These are barely able to support a poor and very primitive population, half-settled or nomadic. It appears that all through Persian history Luristān was inhabited by tribes of hard-living, warlike mountaineers over whom the central authorities exercised little control, and that the same is true of the present-day Lurs, who resent the intrusion into their country of strangers from the neighbouring lowlands of Persia and Iraq, and manifest their feelings in unmistakable ways. But in ancient times the country was relatively prosperous, for it produced one commodity of peculiar excellence, greatly desired by its neighbours near and far – horses. This fact is supported by the large proportion of bits and harness fittings among the bronzes. There is, indeed, a strong presumption that Luristān was none other than Nisaia, the home of the celebrated Nisaean steeds of classical lore.

Godard visited the region in 1929 as Director of the Persian Archaeological Service, and reported that about ten kilometres south-east of Harsīn one scales a saddle some 6000 feet above sea level and enters the Dasht-é-Kawa, a range of hills between two parallel lines of gigantic mountains. The brown treeless undulations stretch away till lost to sight in the distance, with no sign of human habitation but a few black tents. Here in this vast corridor between Harsīn and Khurramabad are countless ancient burial-grounds, the plunder of which has furnished many, and probably most, of the Luristān bronzes in Western museums and collections (**35**, 11ff.)

Two well-equipped American archaeological expeditions, known respectively as the First and Second Holmes Expeditions, visited Luristān in 1935 and 1938. The second appears to have been the more productive, but the finds have regrettably not been published. A short article by Erich Schmidt in the *Bulletin of the American Institute for Iranian Art and Archaeology* of June 1938 reported the preparations, itinerary, and places at which ancient sites were excavated, with photographs of work in progress. In the autumn of 1937 an aerial survey had been carried out to find guide lines for the overland journey, to plot sites, and to define archaeologically promising areas. The following year the American archaeologists entered the Dasht-é-Kawa with a large retinue of diggers from Persepolis and elsewhere, an armed guard provided by the local Governor, and a caravan of eighty horses and donkeys. They spent two months and

travelled 400 miles in the region, excavating many of the previously plotted sites of graves and settlements. The finds were numerous, though bronzes were a minority and apparently did not include the bits and harness ornaments which are so characteristic of the bronze-age Luristān. Nevertheless the full, illustrated report of this expedition is still awaited with much interest.

As in the case of the Ordos bronzes those from Luristān have come to the notice of scholars entirely without documentation, and answers have not been readily found to the questions as to when and by what kind of men they were made. But Luristān, though doubtless always a wild and uncivilized region, was surrounded by the most advanced civilizations of the ancient world, those of Mesopotamia on the west and of Persia on the north, east, and south. Not only is the history of these regions well documented, but their ancient sites have been extensively and systematically excavated. Among their datable remains have been found bronzes and other material of form and design analogous to those of the Luristān bronzes, while a few from Luristān itself bear inscriptions connecting them with persons known to history. The people of ancient Luristān, moreover, who included elements with several racial affinities, were in constant relations, friendly or otherwise, with the men of the plains. For centuries they were famous as breeders of horses, for which their neighbours were eager to exchange the luxuries desired by the men of the mountains. At times they appeared on the banks of the Tigris and Euphrates as raiders and plunderers, at others as allies or mercenaries of the kings of Susa and Babylon. Of these 'ancient Lurs' the most celebrated are the tribes known to us as Cossaeans or Kassites, and by cognate names in Assyrian, Elamite, and Greek texts. They appear to have arrived in the Zagros Mountains as conquerors from the direction of the Caucasus towards the end of the third millennium B.C., and history finds them soon afterwards threatening the eastern frontiers of Babylonia. They are driven back to their mountains, but three centuries later they reappear as soldiers in the service of the kings of Babylon. Seizing an opportunity when the country was left leaderless by a Hittite raid, the Kassite chief proclaimed himself king, and founded a dynasty that reigned in Babylon for nearly six centuries, from about 1760 to 1185 according to the chronology at present accepted. It is to this period, when we may presume that relations between Luristān and Mesopotamia were closest, perhaps somewhat analogous to those between Manchuria and China after the Manchu conquest, that most of the Luristān bronzes are attributable in the light of archaeological evidence.

Claude Schaeffer has devoted a section of his great work on the comparative stratigraphy of Western Asia to the chronology of the Luristān bronzes (**40**, 477–95 . This author believes not only that Luristān had contacts with the Mesopotamian plain from the most remote ages, but also that at some periods regular trade routes were open across it, and the people acted as intermediaries on the one hand between Persia and the Near East and on the other between the Caucasus, Susa, and the Persian Gulf. Analogies which he observes between implements from regions as widely apart as these latter may be accounted for in this way. Schaeffer proposed a tentative chronological classification of Luristān bronzes in three periods; Luristān Ancien *c.*2300–

2100, Luristān Moyen *c.*2100–1700, and Luristān Récent *c.*1500–1100. For the purpose of the catalogue I distinguish them as the First, Second, and Third Phases. They correspond to similar chronological classifications of Bronze Age remains recovered from many sites excavated under control in the Middle East, where the Bronze Age was succeeded by that of iron in the twelfth century B.C., some six or seven centuries earlier than in China. The interval of two centuries between the Second and Third Phases corresponds to a hiatus observed by Schaeffer at Ras Shamra and many other sites in Syria, Asia Minor, Persia, and the Caucasus, between the Middle and Late Bronze Ages, an intermediate period everywhere poor in material remains and perhaps ushered in by some widespread natural catastrophe.

The First Phase of the Luristān bronzes, which is not represented in the collection, comprises mainly socketed axes of similar design to, but more primitive execution than, those on Plate LV, and also a distinctive type of dagger found previously in the royal tombs of Ur. The Second Phase displays a more varied repertoire with considerable ornament, and includes such accomplished pieces as our axe-heads A.139–41. The great majority of the bronzes, including the bits and most of the harness and chariot fittings, fall within the Third Phase. It is these which have attracted the admiration of antiquaries and collectors by their beauty of design and quality of execution. This phase marks the maturity of the bronze art of Luristān. Like that of the Central Asian nomads it drew its inspiration from several quarters, in this case mainly from Mesopotamia and the Persian lowlands and less perhaps from the home country, and it combined and adapted the forms and motives to the needs of a warlike horse-breeding people. The question inevitably arises as to whether such people, the ancient Lurs, could ever themselves have produced craftsmen capable of casting these excellent bronzes in the mountainous region where they have been found buried. Professor Schaeffer, who kindly gives me his opinion in a letter, believes that the Luristān bronzes are indeed of local origin, and points out that they have never been found in considerable numbers elsewhere, not even in the well-explored valley of the Euphrates. We may, however, recall Minns's intelligent surmise that the Central Asian bronzes were cast to the order of their owners by slaves, tributaries and neighbours, and these last would not be likely to need, or retain for their own use, 'export wares' of strange design made especially for a foreign market. We should therefore not exclude the possibility that most of the Luristān bronzes were in fact products of the Euphrates valley and especially of Babylon during the six centuries of Kassite domination.

CHINESE JADES

Of all the arts and crafts of China jade carving is perhaps the most distinctive of the land and its people. Jade was ground into tools and weapons by neolithic man in many parts of the world: its peculiar crypto-crystalline structure gave it exceptional toughness and the ability to take and keep a keen edge, while its fine colours and polished surface must have been the pride and joy of craftsman and warrior alike. In a few regions, apart from China, it was worked into articles of personal adornment, notably by the Aztecs and Mayas in Mexico and Central America, and more recently by the Maoris in New Zealand. When, however, stone implements were superseded by those of bronze and iron, jade lost its industrial value, and quite soon fell from favour as a gem-stone. Everywhere but in China. There, as nowhere else, its inherent beauty and unique qualities as a craft material were appreciated and marvellously exploited.

In Bronze Age China the possession of ornaments and insignia of jade became a mark of rank and authority. They were conspicuous in court ceremonial, and jade shared with bronze itself the function of providing the material, or the principal component, of cult and ritual objects.

The word 'jade' is used to designate two minerals of similar appearance but different chemical composition. One, nephrite, is a calcium-magnesium silicate; the other, jadeite, a silicate of sodium and aluminium. In the pure state both stones are white. The great range of shades of green, brown, mauve, blue, yellow, red, grey, and black is accounted for by the presence, usually in minute quantities, of various metallic oxides, especially those of iron. The two minerals also differ from each other in respect of specific gravity, optical characters, and crystalline structure. The crystals of nephrite form a mass of fine hair-like fibres, closely interlocked, while those of jadeite are an aggregate of very small grains. Those familiar with jade in the carved and polished state can, as a rule, recognize it and distinguish nephrite from jadeite at sight. but sometimes it is necessary to resort to laboratory tests to do so. This applies especially to jades that have undergone chemical change and even decomposition as a result of long burial in the ground.

Neither nephrite nor jadeite is found in the natural state within the eighteen provinces of China proper, and there is at present no valid evidence that jade-stone was ever obtained from native sources (**43**, 48–56). The material of the ancient carvings and of all the jades in the collection is nephrite. It is probable that the Chinese always obtained their supplies of this stone, as they certainly have done for more than 2000 years, from the region of Khotan and Yarkand in Central Asia, where pebbles and boulders were collected from the beds of rivers and where jade was later quarried from deposits in the K'un-lun Mountains. The length and hazards of the journey from

this source were surely one reason for the scarcity and high value of nephrite in ancient China. In more recent times it has also been imported from the neighbourhood of Lake Baikal in Eastern Siberia.

Jadeite was a comparatively late arrival, and literary evidence indicates that it was not worked in China before the eighteenth century, when it was entering the country through Yün-nan Province from Upper Burma (**43**, 46). The bright rather vitreous lustre of polished jadeite, compared with the softer, wax-like appearance of nephrite, did not at first commend it to the Chinese taste of the time. But jadeite included in its colour-range certain brilliant apple-green and emerald-green tones, not found in nephrite, and these soon earned it a place in public esteem as high as that of the older stone. Burma jadeite is the material of the popular Chinese jewellery jade. It has given us our term 'jade green', which some have come to regard as characteristic of all jade. To a Chinese such a name would be meaningless, since he would be aware of the many other greens, not to mention the many other colours, of both nephrite and jadeite. The oxidized surface of a jade pebble or boulder that has lain long in the river-bed takes a pleasant russet-brown colour when polished, and parts of this 'skin' may be incorporated in a carving with agreeable effect, as in B.43 and 47.

The Chinese name for jade is *yü*, but the word may have either a wider or a narrower connotation than the English. The wider comprises not only jade, but all gem-stones, precious and semi-precious, that have been worked by Chinese lapidaries. The narrower connotation signifies nephrite and nephrite only, sometimes specified as *chên yü*, 'true jade'. Jadeite is distinguished by the names *fei-ts'ui* and *ts'ui yü*.

The presence of jade-stone has been established in several localities apart from the Khotan-Yarkand region, Eastern Siberia, and Upper Burma, though no others have been regular sources of supply for the Chinese lapidaries. Nephrite was reported more than eighty years ago by officers of the Geological Survey of India in the Mirzapur District and Rewa State, but the deposits were said to be of inferior quality unsuitable for lapidary purposes, and they have probably never been worked. The Maori jade carvers obtained their material, nephrite pebbles and boulders, from the beds and valleys of the Taramakau and Arahura Rivers on the west coast of the South Island of New Zealand. The mineral was discovered *in situ* by the New Zealand Geological Survey in the Griffin Range in 1906. There are great deposits of nephrite in the valley of the Sweetwater River, Wyoming, and near the town of Kotzebue, Alaska; between them they now supply most of the needs of the many amateur lapidaries in the United States. Large boulders of nephrite have been found in the Turnagain River in the north of British Columbia and near Lytton on the Fraser River further south in the same province of Canada, and it is evident that the mineral must exist *in situ* in the neighbourhood. It has also been found in small quantities at several places in California. In Europe the best-known location is near Jordansmühl in Silesia. There has also been geological confirmation of the presence of both nephrite and jadeite in the Ligurian Appenines.

Confirmed occurrences of jadeite, however, were rare until recently, and the only large deposits known were those near Tawmaw in Upper Burma. But neolithic tools of

jadeite had been discovered both in Europe and America, while most of the material of the Aztec and Maya carvings was certainly jadeite, and must have been found, it would seem, on the American continent. Moreover, some of the comma-shaped and tubular beads, known respectively as *magatama* and *kudatama* and found in ancient Japanese and Korean tombs, were reported to be made of jadeite. There were, however, some discrepancies in the specific gravities quoted as the basis for this identification, and writing in 1949 I uttered a warning against accepting it until the specific gravities had been checked, since the only known Asiatic sources were in Upper Burma and it was unlikely that the ancient Japanese, with no tradition of jade carving, had access to them, as Kōsaku Hamada had suggested, while the ancient Chinese had not (**43**, 48). The presence of jadeite in Japan itself, however, has now been established by Japanese geologists. Numerous large boulders were found and identified in the Kotaki River, Niigata Prefecture, and the mineral has also been discovered in the reef, though at present in small quantity, and not of gem quality. The find was reported by H. S. Yoder, Jnr, in the *American Journal of Science*, April 1950. It is reasonable to presume that the Japanese beads were made of this native jadeite.

In 1947 traces of jadeite were reported by Dutch geologists in the Celebes. More recently deposits have been reported and confirmed in five different counties of Western California, in San Benito, San Luis Obispo, Trinity, Mendocino, and Sonoma Counties. The latest discovery of all, announced in 1954 by Mr W. F. Foshag of the Smithsonian Institution, Washington, was in the Motagua River valley of Guatemala. The official report is reserved for publication in Guatemala and has not yet appeared. But it is the most significant discovery of all, since it presumably indicates the source of the material of the Maya jade-carvers, and perhaps that of the ancient Mexicans. It is the first find of jadeite in the natural state in Middle America, and finally puts to rest the unacceptable suggestion that the pre-Columbian Americans obtained their supplies of jadeite from South-East Asia.

Before leaving this subject of jade-stone I should recall that its presence has been reported or rumoured at different times in several provinces of China and in many other countries, but that these reports have been unconfirmed and in many cases shown to be false. I have explained in previous writings the reasons for the frequency of these misleading rumours and reports (**43**, 48–56). Mexico, Tibet, Mongolia, Manchuria, and Indo-China have been persistently named as sources of jade-stone, but it has not been proved to exist in any of them.

Though jade was known in China before the Bronze Age, perhaps as the result of some prehistoric invasion or migration from Central Asia, the craft of jade carving did not reach its maturity until many centuries after that of bronze casting. Carved jades of the Shang-Yin Dynasty were found at An-yang and of the Chou Dynasty in tombs at Hsün Hsien. They consist mainly of thin plaques or slabs shaped as birds and animals recalling those of bronze decoration, with details engraved or in low relief on the surface. Examples of this technique are on Plates LVI and LVII. It was doubtless dictated by considerations of economy in labour and in the precious material, and also perhaps to enhance the translucency of the stone. A few, such as B.10, were designed as

pendants, but the majority were for attachment to clothing or other material, as is shown by the number and position of the holes. Such clothing has long ago perished and it is rarely possible to determine precisely how these gems or embellishments were used. Carved bone and ivory were applied to similar purposes by the Shang-Yin people. The jade fishes, B.3, 4 and 13, with tails ending in sharp points, were perhaps implements of some kind.

Being too hard to be cut by metal, or even to be scratched by a steel point, jade has to be worked by a difficult and laborious process of grinding with abrasive sands still harder than itself. In neolithic times this was accomplished by the use of sandstone rubbers or with tools of wood or bamboo as vehicles for the abrasive. The wood and bamboo were superseded first by bronze, and eventually by iron, which remains the material of most of the jade carver's tools at the present day. Iron can be conveniently wrought into tools of a great variety of shapes and sizes, and while hard enough to resist rapid wear, it is sufficiently soft to allow the moistened grains of abrasive to bite into it and to be carried into the surface of the jade. Only towards the closing centuries of the Chou period when the use of iron had become general, does it appear that rotary grinders and drills were introduced to speed the work of the jade carver and to produce those *tours-de-force* that have been the admiration of succeeding ages – the reticulation and deep undercutting, the hollowing of vessels, the connexion of parts of the same carving by loose links and hinges, and above all by the interpretation of graceful and complicated designs in this obdurate material in a manner that conveys the impression of modelling in the softest of wax. Examples of all these skills may be found among the jades of the Chin Ts'un find, as reported by Bishop White (**11**, Plate CXIXff.), and this phase is represented in the collection by B.16 and 19. We realize that in the late Chou period the use of jade was no longer confined to the reproduction of ritually prescribed forms and designs. The material had at last become a recognized medium of artistic expression.

By the Han Dynasty its use had been further extended to sword and scabbard fittings and other articles of personal equipment, such as belt-hooks, that had previously been fashioned in metal (Plates LX and LXI). The excavations carried out in the 1920's under the auspices of the Government-General of Korea near Lo-lang in the north of that country brought to light Chinese jades from a burial of the first century A.D. and established criteria for dating certain well-known types to the Han period, e.g. B.20, 34 and 39.

While certain types are thus well attested as products of periods from the Shang-Yin Dynasty to the Han, we are almost entirely without archaeological landmarks to guide us in plotting the course pursued by the jade carvers through the 2000 years of the Christian era. A number of pieces in the former imperial collections bear incised inscriptions of the reign of Ch'ien-lung (1736–95) associating them with that period or ascribing them to earlier ones. But in the great majority of cases we are dependent for our attributions, as we sometimes are in respect of the earlier periods, upon establishing analogies of style or spirit between carvings in jade and productions in other materials more precisely datable. Analogy with subjects of painting and sculpture is,

for example, the basis for the dating of B.49. From the attainment of maturity onward, however, dating by such means is less reliable than for the earlier periods, since the jade designer was not bound by ritual prescription to anything like the same extent as before. There was freedom of expression and an appreciation of previously unsuspected artistic potentialities of jade, which, though still laborious to work, was found to be free from some of the limitations imposed by the materials of other crafts, such as bronze casting and pottery. Hence such examples of ingenuity of design and virtuosity of execution as B.42 and 43. On the other hand the reverence of the Chinese for antiquity and their well-known archaistic tendency, especially marked from the Sung Dynasty onward, would make it peculiarly difficult to distinguish a Sung from a Ming or Ch'ing revival of a classic shape or an archaic decoration. B.36 and B.41 are typical examples of such revivals, for which any attributions should be regarded as provisional only and subject to adjustment to earlier or later periods, when more scientific material is available. The many delightful animal carvings in jade are especially difficult to date since their forms depend less upon the unfettered will of the designer than upon the peculiar shapes and markings of the pebbles or boulders from which they are fashioned.

I have discussed at length the evolution of technique in my book, *Chinese Jade Carving*, but the methods I found in operation just before the Second World War appear to have remained basically unchanged for many centuries. Treadle-operated rotary tools were employed to perform most of the processes. They were numerous, and of shapes adapted to many purposes. The cutting tools were circular discs of steel, scored at the rim, the grinders, gouges, and drills were made of wrought iron, and the polishing tools of wood, leather, and the skin of gourds. The tools were fitted to a horizontal shaft of wood or iron, supported on a rough wooden bench and rotated by the action of the craftsman's feet. One hand held the jade to the head or edge of the tool, to which the other applied the wet abrasive 'sand'. Until recent years this 'sand' consisted of crushed garnets or corundum, but these had been almost entirely superseded by imported carborundum, an artificial product harder and more accurately graded than the natural abrasives. It is with such simple equipment that the finest feats of carving have been performed in what is perhaps the most difficult and the most satisfying of all craft materials. There was much specialization by individual craftsmen, so that any considerable carving is almost certain to have been the work of a team of specialists, and to have required many months for its completion. The work makes demands on the craftsman's patience, which it seems few but the Chinese could satisfy.

Chinese literature, ancient and modern, contains countless references to jade. They are particularly numerous in the famous ritual texts, *Chou li* and *Li chi*. Throughout most of China's history *yü* was the most precious material known to her people. The beauty and costliness of nephrite, the natural qualities that distinguish it from other stones, the mystery surrounding its origin and the manner in which it is worked, and the sacred uses to which it had been put from time immemorial, had a deep effect on the imagination of the Chinese. So *yü* as an epithet acquired an honorific sense: in a

language in which metaphor is conspicuous the word conveys the idea of nobility, beauty, and purity. It may, therefore, seem surprising that Chinese writings specifically on the subject of jade are very meagre compared with those on bronzes. Of the ten chapters of the *K'ao ku t'u* nine are devoted to bronzes and only one to jades. The other antiquarian books of the Sung Dynasty are not concerned with them at all. As I have emphasized, Chinese antiquarian studies have always centred on epigraphy, and the fact that ancient jades were rarely inscribed accounts for their neglect. To Chinese scholars of the past ancient jades were objects for wonder, not subjects for study. The first considerable book by a scholar of eminence, devoted entirely to ancient jades, is the *Ku yü t'u k'ao* of Wu Ta-ch'êng, published in 1889. The present century has produced a few valuable articles in Chinese periodicals but nothing of the nature of an authoritative monograph.

There is now, however, a substantial literature of Chinese jade in Western languages, the majority of it in English, including a dozen works devoted entirely to the subject. The first was the very remarkable *Investigations and Studies in Jade*, published in 1906, in two enormous volumes together weighing nearly nine stones (**42**). It contains much valuable information, especially on the mineralogy of jade, but the fact that only 100 copies were printed makes it inaccessible to students, while its great size and weight preclude its use by all but the strong and active.

It appears from early literary references that jade was associated with a Supreme Creative Power, and was considered as exemplifying and reflecting by its beauty, hardness and durability the qualities attributed to that power. Indeed it must have been to the ancient Chinese the natural substance which manifested, above all others, the divine qualities of perfection and indestructibility. Metal, by which they understood at first bronze, had for them similar associations, but it would seem in a lesser degree, since jade was too hard to be cut, or even scratched by metal, while metal could be melted by heat and destroyed by corrosion. So when the need was felt to represent the Supreme Power by an image or symbol, the material chosen was naturally jade. But the ancient Chinese do not appear to have made their God in the likeness of man. A familiar form among ancient jades, as indeed among jades of all periods, is the disc with a circular orifice at the centre which the Chinese call *pi* (B.17). To all Chinese this is the divine symbol, and there are few who would question that it always was so – to their neolithic ancestors, whatever may have been their name for God; to the Shang-Yin people, who called him Shang Ti, the Lord on High; and to the Chou people, who called him T'ien, the name now usually translated 'Heaven'. The *pi* is certainly found among jades of the most primitive execution, apparently fashioned without the aid of metal tools, among Shang-Yin material from An-yang, among the Chin Ts'un find attributed to the Late Chou period and among the Han Dynasty remains from Lo-lang. The *Chou li*, the ritual text dating from the fourth century B.C. but perhaps containing material from earlier times, says that the *pi* was used to *li T'ien*, 'worship Heaven', and a *pi* was used in the imperial worship at the Altar of Heaven in Peking until the end of the Manchu Dynasty in 1912. The *Chou li* also states that two kinds of *pi*, with different ornamentation, were the insignia of the

fourth and fifth grades respectively of the ancient nobility, whose titles are usually translated 'viscount' and 'baron'. It thus appears that the *pi*-form, at first a religious symbol, came to serve a kind of heraldic purpose, rather in the manner of the cross-form in medieval Christendom. Why it was originally devised as a symbol of God, or Heaven, has never been authoritatively explained. Some have regarded it as the solar disc, but this fails to account for the hole in the middle. I have suggested that the hole, with the light falling through it when the disc is held up, represents the sun shining in the vault of heaven, and conceived of not so much as a remote luminary, but as the centre and source of a creative force extending to the limits of the universe. Whatever its origin, the form of the *pi* has been regarded as a most sacred and venerable one, and has been used as an ornamental device and as a base for decorative design, especially in jade, throughout the history of China. The latter purpose is illustrated by B.41.

Another interesting ancient usage of jade was for the manufacture of weapons, such as the *ko*, or dagger-axe, B.25. It is possible that some of the neolithic implements found in China may have been weapons, as were the jade *mere*, or war-clubs, of New Zealand. But the jade weapons of the bronze-using Shang-Yin and Chou people are elegantly, sometimes very thinly, fashioned. They would certainly have been brittle and no match for the sharp but sturdy dagger-axes of bronze. They were presumably used only for ceremonial purposes, perhaps only for burial with the distinguished dead. For the notion that jade was highly charged with a supernatural creative and preservative power led to the prescription of the deposit of jades in the coffin. The *Chou li* indicates how the body is to be protected by the disposition of a *pi* and five other ritual jades above, below and around it. A further precaution was the closing of the orifices of the corpse with jades made specially for the purpose. In the burial at Lo-lang referred to above some of these 'preservative' jades were found, including a tongue amulet in the form of a cicada, like B.20. The life history of this insect makes it an admirable symbol of resurrection, and led no doubt to the choice of its image for this purpose: for having passed its first years underground it crawls out as a mobile pupa, splits down the back and so releases the perfect insect, which immediately takes flight.

Jade was believed to be no less potent as a protection for the living than for the dead. Amulets and talismans in the forms of auspicious animals and devices, to be kept in the home or carried on the person, have been carved in great numbers. But apart from this the mere possession and frequent contemplation of finely worked objects of jade, especially white jade, have been held to be conducive to the cultivation of virtue and the expulsion of evil thoughts from the mind.

The peculiar qualities of fine jade have seemed to the Chinese to typify all the virtues inculcated by the sages. The *Li chi*, The Canon of Rites, relates how Confucius was once asked by a disciple, why the 'superior man', the gentleman, esteemed jade highly, and marble as of little worth. Was it because jade was scarce and marble abundant? 'No', replied the Master, 'it is because the sages of old beheld in jade the reflection of every virtue. In its lustre, bright yet warm, charity: in its compactness and strength, wisdom: in its sharp and clean-cut edges which yet injure no-one, equity: in

its use as pendants, seeming as if they would fall to the ground, propriety and humility: in the note it emits, when struck, clear and prolonged, music: by its flaws not impairing its beauty, nor its beauty concealing its flaws, loyalty: by its radiance issuing on every side from within, good faith. Etherial as a rainbow, it spoke to them of Heaven: having the spiritual qualities of hills and rivers, it recalled them to Earth. Conspicuous in sceptres and emblems of honour, it was the mark of human worth. Like the Way of Truth and Duty, it was reverenced by all.'

SCULPTURE IN STONE, WOOD AND CAST METAL

One of the most sensational discoveries at the site of the An-yang excavations was of stone sculpture of the Shang-Yin period. Prior to that event the earliest attribution of sculpture in China was to the Former Han Dynasty, about 1000 years later, when, it was supposed, the practice was adopted from some foreign source. The An-yang carvings are limestone animals of which the most striking are a squatting tiger and a standing owl. They are massive and highly stylized, and the surfaces are covered with zoomorphic and geometrical designs similar to those of the ritual bronzes. Their conception and technical finish, like that of the bronzes, indicate that they are products of a long period of development. But whereas the successive phases of the art and craft of bronze casting are well attested through the subsequent eight centuries of the Chou Dynasty, we still know of no representative stone sculpture between the Shang-Yin and the Han. The first sculptures at present precisely datable were executed in the second century A.D. The most celebrated are those at the Wu family mausoleum near Chia-hsiang in the west of Shan-tung Province, dated by inscription to the year 147. The approach to the tomb is guarded by winged lions, gigantic counterparts of our A.89, which the artist succeeded in endowing with an appearance of supernatural strength, vigour, and agility. The ante-chamber of the tomb itself had walls decorated with a remarkable series of bas-reliefs, representing heroes of legend and history, scenes of feasting and hunting, and moral tales of courage, loyalty, and filial piety. All the scenes are characterized by a remarkable decorative rhythm, and most are pervaded by an atmosphere of unremitting but harmonious movement. They are reproduced in Chavannes' great report of his *Mission Archéologique* (**46**), while some slight idea of their character can be formed from C.1, the charming little fragment of bas-relief in the collection.

In the Later Han Dynasty the practice of sculpture was fairly widespread, but an event had already occurred which was to give it a great impulse and an entirely new purpose and direction – the introduction of Buddhism. Indeed, the majority of Chinese sculpture is devotional in character and Buddhist in inspiration, and therefore inevitably limited as to subject and manner of presentation. In earlier times the Chinese had shown little disposition to represent their gods anthropomorphically, and their sculptors little interest in the human form. The new religion, destined to bring about such profound changes in Chinese life and thought, arrived at about the beginning of the Christian era, though no known Buddhist image can be ascribed to a period earlier than the end of the fourth century A.D. The form of Buddhism brought

to China by the early missionaries from Central Asia and India was the Mahāyāna, or 'Great Vehicle' of salvation, which taught that merit attached to the making of images, and to invocations offered in their presence. Thus began the construction under imperial patronage of great groups of cave temples and carvings in the living rock. Those who commissioned such works as acts of piety caused dedicatory inscriptions, usually dated, to be cut upon them, and these have enabled a stylistic chronology of the sculpture to be built up. From the fifth to the ninth century the excavation of shrines and temples and their sumptuous adornment was zealously carried on, interrupted only by occasional spells of persecution instigated by followers of rival cults. Suitable sites for rock temples were much more numerous in North China than in the south, and nearly all the cave shrines are to be found in the northern provinces. The largest groups are at Tun-huang in Kan-su, Yün-kang in Shan-hsi, and Lung-mên in Ho-nan. During the period of partition in the fifth and the first half of the sixth century they all lay within the part of China ruled by the Wei Dynasty.

The 'Great Vehicle' offered for the adoration of its votaries, besides the historical Buddha, a multitude of hypothetical Buddhas, Bodhisattvas, and other divine personages, and the walls and ceilings of the cave temples are crowded with their figures, portrayed singly, or repeated identically many times, or grouped together in paradises. Bodhisattvas are celestial beings who, having attained perfect enlightenment in the course of successive incarnations and a right to immediate Nirvāna, deny themselves this consummation in order to remain accessible to their fellow beings and to succour them in the world of sorrow, sin, and impermanence. In theory sexless Bodhisattvas were represented in pre-T'ang times as predominantly male. In the T'ang period their appearance is often decidedly feminine. This applies especially to the ever-popular Avalokiteśvara (cf. A.84) called by the Chinese Kuan-yin and by Europeans the 'Goddess of Mercy', depicted in still later times as a gracious lady carrying a child and ready to bestow it in answer to the prayer of a would-be mother.

While it is usually easy to distinguish a sculptured Buddha from a Bodhisattva, it is often difficult or impossible to distinguish one Buddha or one Bodhisattva from another, unless his name is inscribed, and many of the inscriptions at the cave temples have disappeared through weathering of the stone in the course of centuries. Bodhisattvas are, as a rule, princely figures, elaborately robed and bejewelled, and wearing a crown or diadem. Buddhas, though regarded as occupying a loftier spiritual plane, are more simply clothed and do not usually wear jewels. But they display some, at least, of the *lakṣaṇas*, the distinguishing physical marks of a Buddha. The most conspicuous of these are the *uṣṇiṣa*, the fleshy protuberance on the crown of the head, and the *urṇa*, a luminous tuft of hair between the eyebrows. They may be recognized in C.3, 6 and 7.

Four stylistic phases can be discerned in the dated rock carvings, and in contemporary *stelae* and statuettes in stone and bronze, of which not a few have survived in temples and monasteries. The earliest carvings were copies of models brought from India and Central Asia, and the first distinctive Chinese style did not emerge until the second half of the fifth century. This is conspicuous in the cave temples

at Yün-kang. Its physical characteristics are a tall and narrow head with a rather flat face; angles of the mouth upturned, producing an expression that has come to be known as 'the Wei smile'; shoulders very slender and sloping. Little interest was shown in the contours of the body which is almost entirely concealed by the folds of heavy drapery carefully arranged. In C.2 and 3 are examples of this First, or Archaic Phase of Chinese Buddhist sculpture. It was succeeded by the Second, or Transitional Phase, which prevailed for about seventy years from the middle of the sixth century to the commencement of the T'ang Dynasty in 618. Among its distinctive features are a large head with a mask square rather than oval, and the appearance of eyelids with a double curve and of creases in the necks of the figures. The shape of the body tends to the cylindrical and in standing figures the legs are often disproportionately short. Less attention is paid to the draperies and what there are cling more closely to the body as in C.4 and 5.

Chinese Buddhist sculpture entered its Third Phase and attained its full maturity early in the T'ang Dynasty. The human figure had at last become not merely a matter of concern to the sculptor, but the subject of anatomical study, with the result that a clear understanding of the functions and articulation of the parts is generally apparent. Draperies and accessories were not neglected, but took their appropriate place in the composition, which acquired a unity and plasticity undreamt of in earlier times. New contacts with India and Central Asia were established through missions and pilgrimages, which brought fresh iconographic models to China, and their more attractive features were soon adopted and transformed to accord with Chinese ideals. The effect of such influences may be seen in the charming little bronze statuette A.84. The features are rounded and the mouth small, and as in most Bodhisattva figures the hair is now dressed in a high chignon. The draperies fall over the limbs in thin rounded ridges, and the figure appears to be moving forward with quiet grace and assurance.

The great persecution of 844, followed by another a century later, virtually brought the evolution of Chinese Buddhist sculpture to an end. Thereafter, though stone statues and *stelae* were still executed, and pagodas of carved stone erected, rock carvings were rare, while painted banners and carvings in wood, such as C.12, appear to have been more widely used as devotional objects, or have at least survived in greater numbers. In this last phase, which comprises all Buddhist sculpture produced since the T'ang Dynasty, new and distinctive styles were not created but elements and mannerisms of past ages were borrowed and combined in novel ways. In the absence of inscription or documentation these later sculptures are usually more difficult to date than those of the Wei, Sui, and T'ang periods. A rare example of a Buddhist bronze precisely datable to the first reign of the Ming Dynasty is A.91, which carries an inscription of 1396, cast with the piece.

A notable but less usual medium for religious image making in post-T'ang times was cast iron, a material that might be thought much less suitable for the purpose than bronze. While it is hardly capable, as is bronze, of faithfully reproducing the smooth surfaces and sharply defined details of a clay or wax model, cast iron may give an

impressive effect of mystery and rugged strength, as in the meditating Bodhisattva, C.13. Though this is not a product of China proper, but of Korea, that country has lain within the orbit of Chinese civilization for more than 2000 years and indeed owes her Buddhism to Chinese contacts. The posture of the figure is one much favoured in Sung and Ming Dynasty China, but the costume and head-dress are quite different and offer an interesting example of the effect of local tradition on Buddhist iconography. The iron Bodhisattva is certainly one of the most beautiful and moving works in the whole collection.

CATALOGUE

CHINESE BRONZES

A.1 FRONTISPIECE
RECTANGULAR RITUAL VESSEL, *FANG I*
Height 10⅝ inches (27 cm)

Each side of the vessel is divided into three horizontal zones. Above and below are two narrow zones in each of which is a pair of confronted *k'uei* dragons with rounded horns. Between the narrow zones is the main field occupied by a *t'ao-t'ieh* mask composed of a pair of confronted *k'uei* with flask-shaped horns, a pair of crested birds with heads directed downwards and tails upward, and numerous detached parts of these monsters. Each side of the cover carries a design similar, when seen from above, to that of the main field of the body, and each side of the knob a design in sunken outline of a bovine mask. The whole composition rests on a ground of squared spirals, executed with marvellous precision. The edges and centre line of each face of the vessel are marked by unusually neat serrated flanges, and these are repeated on the cover.

Smooth light green patina of remarkably even colour.

First Phase. Shang-Yin or Early Chou period.

A.2 PLATE I
CAULDRON, *TING*
Height 8⅝ inches (21·9 cm)

The rim is circular, but the body is three-lobed, each lobe being centred on one of the three legs. Similarly centred are three *t'ao-t'ieh* masks each comprising a pair of large *k'uei* dragons, crested or horned, upon a ground of squared spirals.

Smooth light green patina, shading to darker green.

First Phase. Shang-Yin or Early Chou period.

Inscription: Between a pair of confronted horses four characters which may be read as 父乙羊先 *Fu I yang hsien*. The first two are the dedication to Fu I, 'Father I'. As explained in the introduction, an ancestor was designated posthumously by a character for one of the 'Ten Stems', the name of a day in the ten-day week on which it was appropriate to offer him sacrifice.

The interpretation of the other two characters presents some difficulty. Takata regards the upper and lower elements (*Ku chou pien*, LXXXIX, 22) as forming a single character, but gives only one instance of its occurrence, on an *i* vessel also dedicated to 'Father I'. He suggests that the upper element meaning 'sheep' is the determinative, and the lower, now read *hsien*, a phonetic, and that the character is an ancient alternative for 毨, 'to shed hair, to moult', with the determinative for hair or wool replaced by that for sheep. This explanation is not very satisfactory. No such character

is found in the *Shuo wên*, and the demands of symmetry in the inscription before us would seem to require two characters to balance *Fu I*. The primary meaning of *hsien* is 'to advance, to proceed' in space or time, and by extension may designate a leader or a parent or ancestor who has 'gone before'. *Yang Hsien* might thus be a title, 'Leader (or Ancestor) of the Flock'.

The two horses may be a device indicating ownership by a clan or family. There are several recorded examples of pairs of confronted horses associated with early bronze inscriptions (e.g. Lo Chên-yü, *San tai chi chin wên ts'un*, VI, 26 and 43; VII, 18), but they are rarely as well drawn and proportioned as here. They are of special interest as revealing the characteristics of the horse domesticated by the Shang-Yin and early Chou people, essentially those of the wild horse of the Steppes known as Prjevalsky's horse. The most conspicuous are the length of the body in proportion to the animal's height, the large head with long ears, the erect mane, and the long tail. A peculiar feature of this is the contrast between the upper portion covered with short hairs and the lower covered with long. These horses should be compared with the bronze figurine A.83, representing the thoroughbred horse first imported to China from Ferghāna in the Han Dynasty.

A.3 PLATE II
RECTANGULAR CAULDRON, *FANG TING*
Height 10¾ inches (27·3 cm)

On each of the four sides, upon a ground of squared spirals, is a vigorous *t'ao-t'ieh* mask, composed of the bodies and detached parts of *k'uei* dragons. The cylindrical legs are decorated with the stylized forms of cicadas.

Silvery green patina: there are traces of black inlay material.

First Phase.

There is a nearly identically similar cauldron in the Fogg Museum at Harvard (Grenville L. Winthrop Bequest). The decoration is closely paralleled by that of a rectangular casket-shaped vessel, *fang i*, in the Chicago Art Institute (*Chinese Bronzes in the Buckingham Collection*, pl.XXIV) and of a *tsun* in the Kano Collection (*Hakkaku Kikkin Shū*, pl.V). The *fang i* and the *tsun* carry a six-character inscription, the style of which associates them with the Early Chou period, as does the rich but somewhat florid decoration of all four pieces.


Fig.1

Inscription: Three deeply sunk characters reading, in current script, 戈父甲. The first is a highly pictographic representation of a bronze dagger-axe, *ko*, similar to A.19 in the collection, fitted to its wooden haft, which is apparently surmounted by an ornament (cf. A.41). The tassel depending from the weapon on the right is perhaps that of a sheath in which it was encased when not in use, while the haft terminates in a three-pronged butt. The figure of a *ko* occurs fairly frequently on First Phase bronzes, usually at the commencement or the end of an inscription, as on A.7, and is supposed to represent a name or to be a device indicating ownership by a clan or family. The second and third characters are the dedication to *Fu Chia*, 'Father Chia' (see p.5).

For a discussion of the evolution of the character for *ko* see Yetts, *The Cull Chine Bronzes*, p.101.

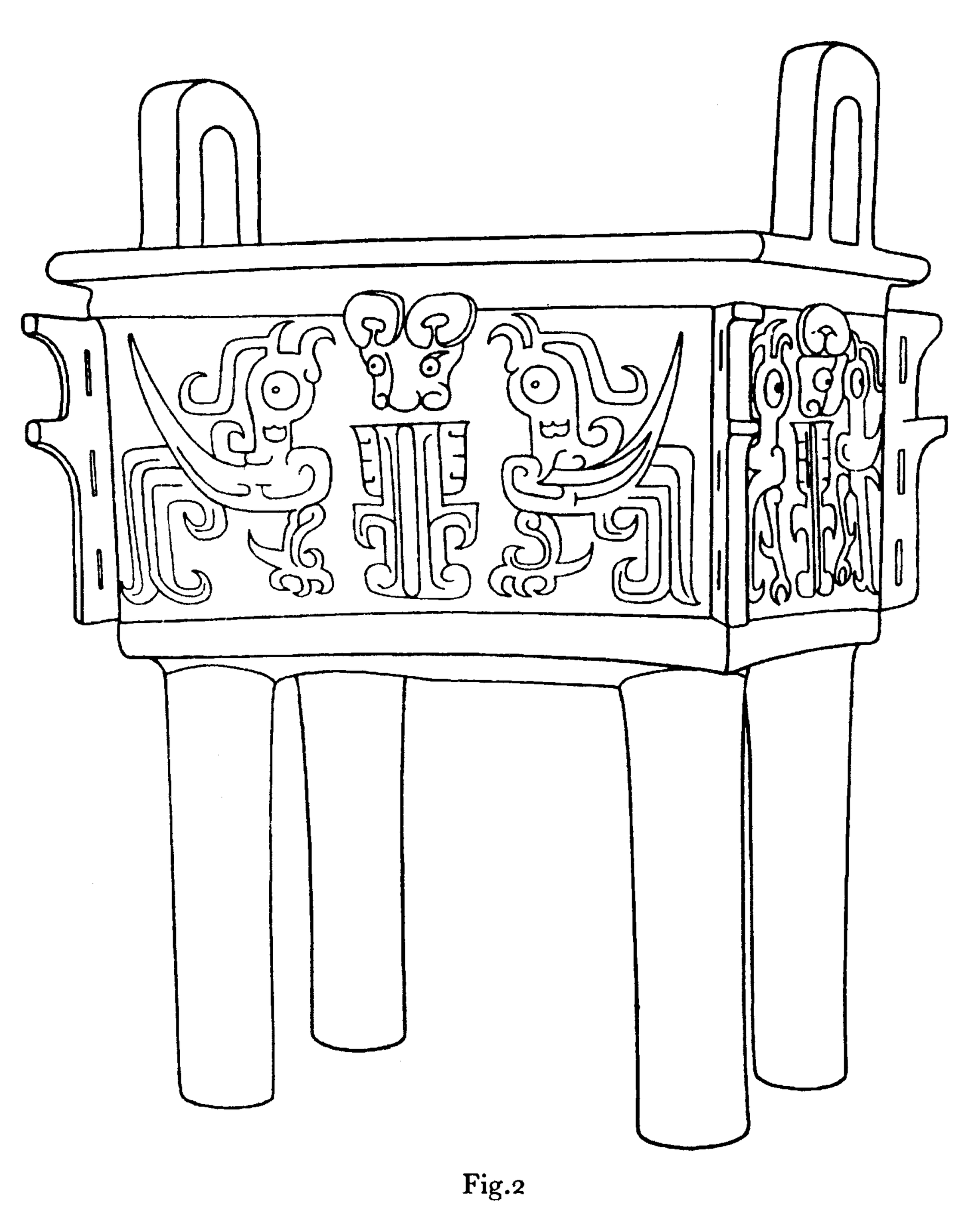
A.3a FIGURE 2
RECTANGULAR CAULDRON, *FANG TING*
Height 8¾ inches (22·2 cm)

The vessel is of similar shape to A.3.

Each side is occupied by a pair of confronted birds, handsomely feathered an crested, separated by a feline mask above a symmetrical arrangement of detache animal parts. At the edges are prominent vertical flanges.

Smooth light green patina with some red patches and incrustation.

First Phase. Shang-Yin or Early Chou period.


Fig.2

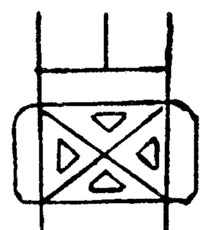
A.4 PLATE III
KETTLE, *HO*
Height 9 inches (22·9 cm)

The neck and domed cover are oblate, while the body is four-lobed, each lobe being centred on one of the four legs. The legs and the spout are nearly cylindrical.

The decoration of the cover, neck and body is imposed on a ground of squared spirals. The principal motive is the *t'ao-t'ieh* of a powerful ovi-bovine type. The mask appears twice on the cover, facing fore and aft, and is repeated four times on the body and once on the handle. On the neck are four elongated figures of *k'uei* dragons.

Silvery green patina with patches of bright blue-green incrustation.

First Phase. Shang-Yin or Early Chou period.

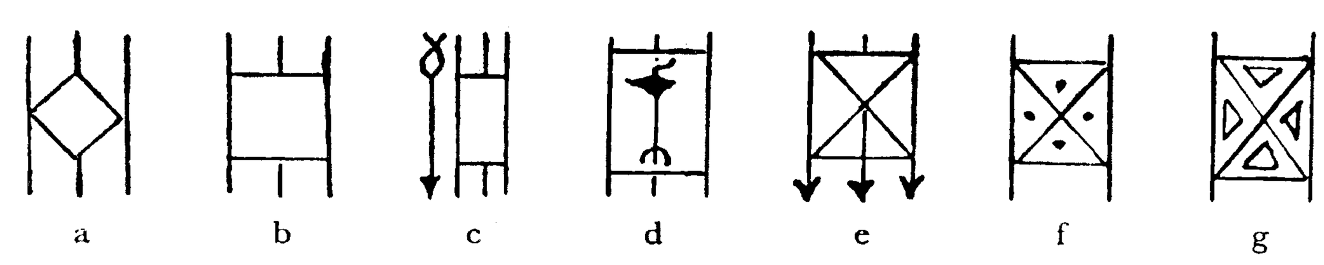

Fig.3

Inscription: The device here reproduced appears in relief inside the cover and is repeated under the handle. Inscriptions in relief are uncommon, and this device seems to have been impressed with a die in the soft material of the original models. Several occurrences of a simpler form are recorded in association with weapons, usually arrows, when it has been held to represent a quiver or weapon case. The character in Fig.4*a* stands as a radical, No.504, in the *Shuo wên*, where it is described as a pictogram meaning 'to store things separately', and is equated with 宁 *chu*. The variant *b* is of fairly frequent occurrence on First Phase bronzes, perhaps with this signification.

Figure 4*c* is found on a *ting* and also on an *i* (Liu T'i-chih, *Hsiao-chiao-ching-ko chin wên t'a pên*, II, 10 and VII, 19); *d* comes from a *ho*, and *e* from a *ku* (Lo Chên-yü, *San tai chi chin wên ts'un*, XIV, 4 and 17). All these compounds are suggestive of cases for weapons, sheaths or quivers, and *c* is equated by Takata (*Ku chou pien*, LIX, 12) with 𥫗, defined as a quiver in the *Shuo wên*.

Figure 4*f* occurs on a *chüeh* vessel (*San tai*, XVI, 28) and *g* on a *yu* (*Ku chou pien*, XXI, 31), and the device on the Seligman *ho* appears to be a further elaboration of the same motive. No examples of *f* or *g* occur in a context which throws light on their meaning, but the idea of storing separately seems to be further emphasized by the quartered compartments. The reference may be to the care of sacred or treasured objects.

Another interpretation is proposed by Kuo Mo-jo, who would equate Figs.4*f* and *g* with 鹵 *lu* (*Chin wên ts'ung k'ao*, 1932 ed., pp.215–19; 1954 ed., pp.200–14). The primary meaning of *lu* was 'shield', though the character was subsequently borrowed to express its current signification, 'a salt marsh'. Kuo has assembled a substantial body of evidence to support his interpretation, which is the one favoured by Yetts (*The Cull Chinese Bronzes*, p.39 and *An Exhibition of Chinese Bronzes in London*, in the *Bulletin, Museum van Aziatische Kunst, Amsterdam*, No.36, 1952, p.138).


Fig.4 a b c d e f g

A.5 PLATE IV

TRIPOD WINE-VESSEL, *CHÜEH*

Height 8½ inches (21·6 cm)

The upper three-quarters of the body and the underside of the spout are covered with decoration consisting of squared spirals and dissolved *t'ao-t'ieh* and animal forms. On the handle and the opposite side of the vessel are bovine heads in relief.

Smooth green and red patina.

First Phase. Shang-Yin or Early Chou period.

Illustrated in Karlgren, *Yin and Chou in Chinese Bronzes*, pl.IX.

There has been much speculation as to the origin and purpose of the two capped columns on the rims of *chüeh* vessels. They are also found on the rims of the vessels called *chia*, close relatives of *chüeh*, but without spout or tail. Yetts has suggested that when the vessel was heated in a brazier, the capped columns provided a means by which it could be lifted by tongs without spilling the contents (*The Cull Chinese Bronzes*, pp.29, 30). Kuo Pao-chün suggested that the columns are vestiges of devices used to support or strengthen horn or pottery prototypes of these bronzes (*Ku ch'i shih ming*, in *Studies presented to Ts'ai Yüan-p'ei on his Sixty-fifth Birthday*. Part II. Pei-p'ing: 1935, pp. 690–2). More recently Claude Schaeffer has drawn attention to certain pottery vessels excavated at a site in Persia believed to ante-date by several centuries that of An-yang. The Persian pots are tripods which may well be prototypes of the *chia*, and their rims are furnished with pairs of little cups such as might be used to contain condiments (*Stratigraphie Comparée et Chronologie de l'Asie Occidentale*, pp.598–604 and Figs.321–3). This would seem to offer interesting evidence of contact between the Far and Middle East in prehistoric or proto-historic times.

Inscription under handle: The four-sided cartouche known as *ya hsing*, the upper portion of which is missing, encloses a small figure resembling a swooping bird, perhaps the emblem of a clan or family. Below is the dedication in two characters, 兄丁, 'Elder brother Ting'.

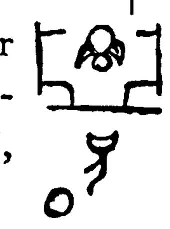


Fig.5

The significance of the cartouche has been the subject of much discussion and speculation. Yetts (ibid., p.32) mentioned some of the explanations that had been proposed – the ground plan of an ancestral temple or of a tomb, the picture of a ritual wine-vessel seen from the side, the picture of two pairs of bows. He concluded that since no-one knew for certain what it meant, a safe name for it was *ya hsing* 亞形, 'the form shaped like the character *ya*'. There are several well-defined types of *ya hsing*, as shown in Fig.6, and in each the proportions may vary considerably.

Karlgren in *Some Fecundity Symbols in Ancient China* (*BMFEA*, No.2 [1930], pp.23ff.) proposed an explanation of the jade ritual object *ts'ung* 琮, which has the distinctive shape of a hollow cylinder enclosed by a rectangular body, and has for long been regarded as the ancient symbol of the deity Earth. He developed a well-documented theory that the object, or its prototype, was originally the envelope for the ancestral tablet of a royal or princely family, and that it only came to be used as a symbol in the cult of the Earth by reason of the intimate connexion of such a family with that deity.

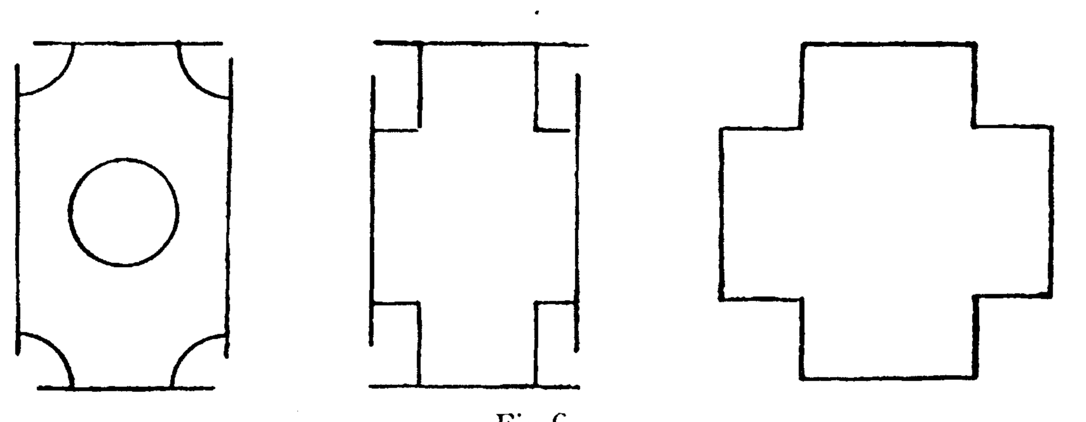


Fig.6

The name of the ancestral temple, written 宗 and now read *tsung*, was transferred by a process common in the formative period of the language to the jade, the most conspicuous object in the temple. The addition of the jade determinative or 'radical' to the character, when it was desired to specify the ritual object, i.e. 'ancestral temple object', was a later development. Karlgren observed a remarkable resemblance between the contours of the *ts'ung* and certain forms of the cartouche on the bronzes, but without maintaining that such a relationship necessarily existed.

Much more recently, however, in *The Pillsbury Collection of Chinese Bronzes*, 1952 (pp.19, 20), Karlgren has definitely expressed the view that the *ya hsing* is a drawing of a *ts'ung*, and that 'wherever it appears on a bronze, it seems probable that it simply means "ancestral temple object"'.

I believe, however, that the *ya hsing* does in fact depict the salient features of the plan of an ancient tomb. This was the view expressed by Carl Hentze in his *Bronzegerät, Kultbauten, Religion im Ältesten China der Shang-Zeit*, 1951, pp.203–9. One of the most important discoveries made through the excavations at An-yang was the form and structure of a series of eleven great tombs, the so-called 'Royal Tombs' of the Shang-Yin Dynasty. Each of these was in the form of a square pit, about fifty feet in width and depth, narrowing to thirty feet wide at the bottom. It was entered from the north, east, and west sides by broad flights of steps of beaten earth, and from the south by an incline of similar breadth down which the body is presumed to have been carried. On the square floor of each pit a circular burial chamber was dug, and roofed in with wooden boards at the level of the surrounding soil. A photograph of one of these excavated tombs may be seen in Pelliot's article, 'The Royal Tombs of An-yang', pl.I, Fig.2, in *Studies in Chinese Art and Some Indian Influences*, London: 1936. From this it is clear that, when excavated for the burial, the floor of the pit would have had the appearance of a *ts'ung* in horizontal section, and when filled in, the outlines of the grave would have been those of a *ya hsing*. This was the case, as I myself observed, when I visited the An-yang sites in 1939. As I wrote in an article on this visit in *Transactions of the Oriental Ceramic Society*, Vol.24 (1948/9), p.14, 'It was interesting to recognize, from photographs published during the excavations, the outlines of the "Royal Tombs", great squares with approaches to the centre of each side. After the tombs had been filled in, the earth had sunk a few inches, and their plan was plainly visible on the ground.'

In the light of these discoveries, it is, I feel, beyond reasonable doubt that the

contours of both the *ya hsing* and the *ts'ung* derive from those of the great Shang-Yin tombs. They provide, moreover, ample evidence for the recognition of the *ts'ung* as the symbol of the deity Earth. For what better symbol could be devised for Mother Earth than the portal by which her children returned to her bosom? Why the portal was built in this very characteristic shape would involve a discussion beyond the scope of this description. It appears, however, that in Shang-Yin times the geomantic notions were well advanced which required buildings for the living and the dead to be carefully orientated to the four quarters. So too was the belief that the dead, or at least the great and honourable among them, each possessed two souls, one a celestial spirit that ascended on high to join the conclave of his ancestors, the other a terrestrial ghost that dwelt in an underworld beneath the grave. The first must be served and nourished by periodical sacrifice, the second by food, treasure, and a slaughtered retinue, human and animal, buried with him in the grave. His body was interred face downward in the circular burial chamber, and below him in a smaller pit it was customary to bury a dog. Pelliot surmised (ibid., p.54) that the dead body was so placed in order that it might be as near the nether world as possible, and that the pit was intended to facilitate its way thither, led or accompanied by the dog.

It is an interesting fact that while the 'Royal Tombs' at An-yang each had four approaches, smaller tombs had only two, a flight of steps on the north and an inclined descent on the south. This second plan is that of important tombs of the Chou Dynasty excavated elsewhere, e.g. those of the princes of the Wei State at Hsün Hsien, and it has been reasonably presumed that the Shang-style tomb with its four approaches did not persist into the Chou. It is certainly the case that while the *ya hsing* is common on bronzes from An-yang and other provably Shang-Yin material, it is found rarely if ever on bronzes which are provably Chou. Indeed, Karlgren at one time regarded the *ya hsing* as a criterion of Shang-Yin date (*Yin and Chou in Chinese Bronzes*, *BMFEA*, No.8 [1936], p.21). Though this conclusion was somewhat disturbed by the find of a bronze inscribed with the *ya hsing* at Hsün Hsien, such might well be a relic of the Shang-Yin, the Wei State having been a former centre of Shang-Yin power, or such usages might be examples of a late survival. The truth of this matter may not be revealed unless or until the tombs of the early Chou kings in Shensi are excavated.

Karlgren maintains in *The Pillsbury Collection* (p.19) that the resemblance of the cartouche to the character *ya* 亞 in the classical script is purely fortuitous and that we should equate the cartouche with 琮 and read it (in modern pronunciation) *ts'ung*. While fully agreeing that the cartouche and the jade *ts'ung* have a common origin, I find this view difficult to accept. There are many variations of the cartouche as inscribed on bronzes with and without lateral extensions of the arms of the cross. In the edition of the *Shuo wên* before me, a copy of a Northern Sung manuscript, the character is entered as 亞 in the list of radicals and 亞 in the body of the work. There the meaning is given as *ch'ou* 醜 'hateful', with the remark that among tradesmen it has the sense of 'secondary, inferior'. The explanation of its structure, that it depicts two men back to back, is typical of many such erroneous surmises by the author of the *Shuo wên*.

Ch'ou itself is defined as *k'o wu* 可惡 'hateful, abhorrent', and this suggests an interesting history for the character 惡. From what has gone before it is clear the 亞, the pictogram of a tomb, was borrowed, appropriately enough, to express the idea of 'hateful'. When it was desired to specify this secondary meaning, the determinative for 'heart' 心 would have been added to show that the mental concept, not the tomb itself, was intended. This is in accordance with a well-established practice in the development of the script.

Another matter of special interest to us is the *Shuo wên's* association of the character *ch'ou* with *ya*. *Ch'ou* comprises two elements, 'wine in a vessel' and 'ghost', and many occurrences on the bronzes are recorded of its archaic form, sometimes with the addition of a food vessel, the whole enclosed in a *ya hsing* as in Fig.7 (e.g. *San tai*, VI, 6; XI, 4: *Hsiao-chiao-ching-ko*, V, 3; VII, 6; IX, 44). This is an excellent example of the method of forming characters known as *hui i*, 'suggestive compounds', the offering of wine to a ghost within the tomb to convey the idea of funeral rites.

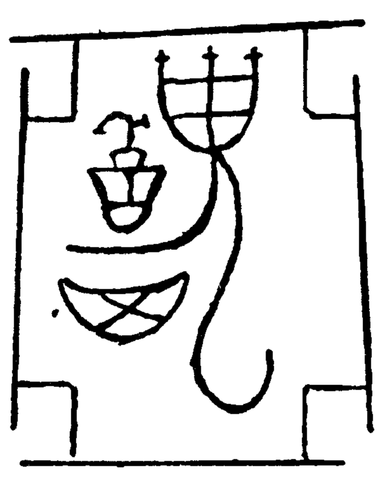


Fig.7

A.6 PLATE V

WINE VESSEL, *KU*

Height 10⅛ inches (25·7 cm)

On the flaring upper part are four rising blades in the form of cicadas, stylized and elongated. The ornament of the middle and lower parts consists of *t'ao-t'ieh* masks, composed mainly of squared spirals, and much dissolved.

Green patina of various shades.

First Phase. Shang-Yin period.

Illustrated in Karlgren, *Yin and Chou in Chinese Bronzes*, pl.XIX.

Similar specimens excavated in 1950 from tombs at Wu-kuan (see map, p.3) are illustrated in Kuo Pao-chün, *1950 nien ch'un Yin Hsü fa-chüeh pao kao*, in *Chung-kuo k'ao ku hsüeh pao*, V (1951), pls.17–21.



Fig.8

Inscription: On the inner surface of the foot a single character, in current script 守 *shou*, 'protect'.

A.7 PLATE VI

WINE VESSEL, *TSUN*

Height $6\frac{5}{8}$ inches (16·8 cm)

On the wide neck is a single band of decoration consisting of two pairs of confronted long-tailed birds on a ground of squared spirals. Each pair is separated by a bovine mask in full relief.

Smooth green and greyish green patina.

First Phase. Shang-Yin or Early Chou period.

Inscription: Four characters on the base inside the vessel reading, in current script, 作從彝 followed by the pictogram of a 戈 *ko*, dagger axe (see A.3).

The first character occurs very frequently on the bronzes, especially in dedicatory inscriptions, and its equation with 作 *tso*, 'to do, to make', is well established. It is sometimes preceded by the name of a person, though often not, as in the present case; and it is usually followed, though not necessarily immediately, by the name of a vessel, or by a character that could be read as such. Between *tso* and the name of the vessel are usually interposed one or more characters indicating a ritual usage or a dedication to an individual. In these formulae, of which there are several variants, *tso* is commonly read as a finite verb 'made' or 'has made', in the sense of 'caused to be manufactured, commissioned'. Where a subject is indicated, as in A.9, this rendering at least makes sense, but not, I submit, in the many cases where there is no subject, as here. In all such formulae the 'making' must surely be impersonal and must refer to a sacrifice, not to the vessel.

For the second character the *Shuo wên chieh tzŭ* gives the meaning 'to follow', and says that it is composed of the graph for 'to walk', a foot with footmarks, and another of two men in profile, one walking behind the other. While 'to follow' was, and still is, the primary meaning, the figurative usage of 'to obey, to accord with' is almost as common, in both the ancient and the modern language. The character is found on bronzes with its primary connotation, e.g. as of a subordinate dutifully following his lord on a campaign, but also in short dedicatory phrases like the one before us, of which numerous examples are recorded (e.g. Lo Chên-yü, *San tai*, VI, 20, 24, 25, and XIV, 5).

The third character occurs perhaps more frequently than any other in bronze inscriptions. The Lesser Seal form, as stabilized in the Han period 彝, as well as the current form, comprises elements which may be analysed as a 'pig's head' at the top, a rice plant and a hank of silk in the middle, and two hands below. This is the explanation of its structure given in the *Shuo wên*, which states that the 'pig's head' element is a phonetic. Both the *Shuo wên* and the *Êrh ya* define the character, though in different terms, as a general name for ritual vessels. But study of occurrences of the character in chronological sequence, which was not possible for the author of the *Shuo wên*, has shown that its origin is quite different, and in the First Phase bronze inscriptions, like that before us and on A.8, the image appears as a slaughtered bird upheld by the two hands. Left to the mercy of generations of scribes the character underwent a curious transformation. The head and neck of the bird became indistinguishable from the

Fig

conventional graph of the 'pig's head', the fan-tail was transmuted into the hank of silk and the claw and the drops of blood falling from the beak into the growing rice plant. The character, in fact, was not what Chinese epigraphists call a *hsieh shêng*, 'phonetic compound', but a *hui i* 'suggestive compound' (see Hopkins, *Metamorphic Stylization and the Sabotage of Significance*, in *JRAS*, 1925, p.457).

The definitions given in the *Êrh ya* and the *Shuo wên* leave us in no doubt that to the Chinese of the Han and, probably, of the Late Eastern Chou periods the character signified a ritual vessel, and it is customary to read it in this sense in the bronze inscriptions. Yet I cannot believe that this was its primary meaning. The First Phase bronze inscriptions contain a rich nomenclature of ritual vessels, expressed as a rule by pictograms or by phonetic compounds with one or other of the 'vessel' determinatives. A graph of a slaughtered bird held up by two hands does not suggest the idea of a vessel. It does suggest most vividly the idea of sacrificial ritual, and that, I venture to think, is its commonest meaning in the First Phase bronze inscriptions. If *i* 彝 meant sacrificial ritual, *i ch'i* 彝器 would be the obvious name for ritual vessels in general, as it still is. Then by a process of metonymy common in Chinese, English, and many other languages *i*, 'a ritual' must have acquired its secondary meaning of a ritual vessel, just as 'a sherry' may carry the secondary meaning of a sherry glass and 'an express' that of an express train. In the Classics when *i* is not followed by *ch'i* 器, utensil, it is generally read as 'regular, normal', i.e. ritually prescribed.

No consideration of 彝 should be left without reference to another character nearly as common in dedicatory formulae and often combined with it, though not found in the Seligman inscriptions, namely *tsun* 尊. In the archaic and the Lesser Seal scripts this appears as another 'suggestive compound' 䔿, a covered vase or jar again upheld by two hands, and conveying the idea of an offering of wine, the counterpart of an offering of flesh. In the Classics, 尊 is generally read as 'to honour' in reference to either the living or the dead.

There is one well-known passage in a classical text, the *Chou li*, III, 27, in which the duties of an officer called the *Ssŭ tsun i* 司尊彝 are defined, and which should be noted, while it is borne in mind that our inscription must antedate the *Chou li*, as we know it, by perhaps five centuries or more. The officer is charged with the arrangement of the Six *Tsun* and the Six *I*, which are features of sacrifices held at the four seasons and on two intermediate occasions. These *tsun* and *i* are understood by Biot, following the tortuous explanations of the Han commentators, to be ritual vessels. The translation based on this assumption entirely fails to make sense to anyone acquainted with the ancient vessels themselves. The passage, obscure at best, may be rendered plausibly if the *i* and *tsun* are understood to be 'offerings'. The first two *i* are called the chicken offering and the [wild] bird offering, for each of which there are dishes. The Han commentators and Biot (*Le Tcheou-li*, I, 472) take this to mean 'vases of *i* shape on which are engraved or painted figures of cockerels and phoenixes, the vases resting on saucers', a rendering that makes severe demands on one's credulity. The names of the other *i* and *tsun* are also, I believe, susceptible of reasonable interpretation only as the names of offerings.

To return to our inscriptions, it seems that when interpreting these First Phase formulae it as as rash to attach the secondary meanings indiscriminately to *i* or *tsun* as it is to render *tso* 'manufactured' or 'commissioned'. In the present case that which is made or done or performed in obedience to prescription is the sacrificial ritual. The inscription could be read as *tso ts'ung-i*, 'for dutiful performance of sacrifice', or if one insists on the secondary meaning of *i*, *tso-ts'ung i*, 'ritual vessel for performing the duties'.

A.7a NOT ILLUSTRATED

WINE VESSEL, *TSUN*

Height $7\frac{3}{8}$ inches (18·7 cm)

Nearly identical in shape and decoration with A.7. The body is, however, oval rather than circular in horizontal section, the longest and shortest diameters being $5\frac{1}{2}$ inches and $5\frac{1}{8}$ inches respectively.

Smooth green patina with areas encrusted with brighter green and brilliant blue.

First Phase. Shang-Yin or Early Chou period.

Inscription: Five characters inside the base reading in current script 永作旅父丁 *yung tso lü Fu Ting*, 'for perpetual sacrifices to Father Ting'. For a remark on *tso lü* see p.52.

A.8 PLATE VII

TRIPOD CAULDRON, *LI*

Height $6\frac{7}{8}$ inches (17·5 cm)

The neck carries a narrow zone of decoration consisting of squared spirals and diagonals in low relief.

Thin greenish and reddish patina with some patches of incrustation.

First Phase. Shang-Yin or Early Chou period.

Illustrated in A. J. Koop, *Early Chinese Bronzes*, pl.49a and referred to in Karlgren, *New Studies on Chinese Bronzes*, p.27, No.178. For a discussion of the design as an extreme stage in the stylization of the *k'uei* dragon see Yetts, *The Cull Chinese Bronzes*, p.28.

Inscription: Five characters, much worn and corroded, but all clearly legible except the fourth.

作仲辛口彝 'For [?] sacrifice to Younger Brother Hsin'.

The fourth character, of which only the lowest element, *min* 皿 in current script, can be clearly seen, should be a word qualifying *i*, 'sacrifice' or 'sacral vessel'. I have been unable to identify with certainty the vestiges before us with any recorded character in the archaic script.



Fig.

A.9 PLATE VIII

COVERED FOOD VESSEL, *KUEI*

Height 7 inches (17·7 cm)

The cover and shoulder of the vessel each carries a zone of decoration consisting of dissolved *t'ao-t'ieh* masks on a ground of squared spirals and two small, horned masks presented more naturalistically and in relief. Around the foot-rim is a narrower belt of squared spirals similar to that of A.8. The handles carry masks with long horns.

Smooth bluish-green patina.

First Phase. Shang-Yin or Early Chou period.

In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.52).

Inscription: Five characters inside the vessel, repeated inside the cover, and reading in current script: 卂伯作旅簋 *Hsin Po tso lü kuei*, 'The sacrificial *kuei* of Hsin Po'. The inscription was recorded by Liu T'i-chih in his repertory, *Hsiao-chiao-ching-ko chin-wên t'a pên*, VII, 65, and discussed by me in *The Hsin Po Kuei, an Early Chinese Bronze Ritual Vessel*, in *JRAS*, 1952, 1–3. The last character, a pictogram of a covered vessel and beside it a hand holding a ladle, indicates the purpose of the bronze and the class to which it belongs. It has been customary from the time of the Sung cataloguers onward, to transcribe this character 敦 *tui*, and to place the vessels so designated in a *tui* class. *Tui*, however, was not so written in the ancient script, and the character on the bronze has a closer analogue in 毁 *chiu* (for an explanation see Yetts, *Eumorfopoulos Catalogue*, I, 44 f.) *Chiu* is employed by some modern Chinese writers, including Lo Chên-yü, but the common practice at the present day is to equate it with *kuei*, as above, a character also in fact anciently pronounced *chiu*.

For 旅 *lü*, as a word qualifying the name of a vessel, a number of interpretations have been proposed. The *Shuo wên chieh tzŭ*, under its radical 234, explains the Lesser Seal form as depicting men marching behind a banner and under a pennon, and defines it as a military force of 500. On the basis of this and other evidence, it has been suggested that *lü* vessels were intended for use in the field or when travelling, and this explanation has been widely accepted. An alternative is that *lü* was a term for a particular kind of sacrifice, subsequently extended to mean 'sacrifice' generally. This is the view favoured by Karlgren (*The Pillsbury Collection*, p.56).

Hsin, followed by the honorific *po*, might be read as the name of a state, place, or family, but I have found no trace of such a name. *Hsin*, or *hsün*, is a character very rare in inscriptions, though it stands as a radical, No.430, in the *Shuo wên*. The entry there reads: 'Rapid flight, as of a bird; derived from 飛 *fei*, but with the feathers omitted'. On the previous page *fei* is defined 'the soaring of a bird'. Its Lesser Seal form is a pictogram of a long-necked bird on the wing, seen from below 飛, while that of *hsin* 卂 may well represent the same bird swooping with wings closed. The current form of *hsin* appears in the *K'ang-hsi* Dictionary, under Radical 24, but not as a rule in modern dictionaries. Takata records the archaic *hsin*, but only as an element, combined with the 'grass' radical, in a character on one of the Ten Stone Drums (*Ku Chou pien*, XCVI, 10 and LXXIX, 30). This character with twelve others was all that remained of the inscription on the drum in question in the Northern Sung Dynasty, and it appears in



Fig.11

an inked-squeeze which survives from that period (*Pei Sung t'o Chou shih ku wên* and *Chin shih so*, Drum No.8). It is supposed to be the name of some kind of plant. But the whole of the inscription has since disappeared, and the drum is now a complete blank.

Hsin, however, survives as the phonetic element of several characters in use today, such as 迅 'swift', 汛 'a flood' and 訊 'to interrogate judicially, to investigate'. Each of these words, including the last, expresses the idea of 'swooping' in special and figurative usages. The practice of distinguishing such usages by the addition of a radical or determinative was devised to avoid ambiguity, but in early times characters were commonly 'borrowed' to write a word having a similar sound, or were used in an extended or figurative sense, without the addition of a radical. 訊 'to interrogate' is the only 卂 character of which there are numerous occurrences in the Classics, where it usually carries the same meaning, and it is possible that the *hsin* of our inscription, there written without the speech radical, is used in the sense of 'to interrogate'. Our second character, *po*, is a good example of a 'borrowed' character, *chia chieh*; it is written in the inscription without the 'man' radical, which was added to it in later times to distinguish it from 白 *po*, 'white'.

While the institutions and terminology in vogue at the beginning of the first millennium B.C. cannot be safely inferred from those of the *Chou li*, and in any case this famous ritual code makes no mention of a 訊伯, it does provide for a judicial officer whose duty it was to try rebels and to 訊, 'interrogate', witnesses (Sun I-jang, *Chou li chêng i*, LXVI, 42 and Biot, *Le Tcheou-li*, II, 322). The *Hsin Po* of the inscription may have been the title of an inquisitor or judge at a feudal court of ancient China.

A.10 PLATE IX

FOOD VESSEL, *KUEI*

Height 5½ inches (14 cm); width 10 inches (25·5 cm)

There are three zones of decoration. Those at the rim and foot are friezes composed of animal heads and whorl circles alternating with *k'uei* dragons having their heads turned backwards over their bodies. Between the friezes is a wider zone occupied by vertical ribs.

Dark green patina.

First Phase. Shang-Yin or Early Chou period, probably the latter.

The vessel closely resembles that illustrated by Karlgren in *Yin and Chou in Chinese Bronzes*, pl.XV.

A.11 PLATE X

FOOD VESSEL, *KUEI*

Height 5⅝ inches (14·3 cm); diameter 8⅞ inches (22·4 cm)

Bronzes of the *kuei* class usually have two handles for lifting: this vessel, which lacks handles, might be regarded alternatively as an unusually wide variant of the *tsun* class.

Almost the whole surface is covered with decoration, divided horizontally into three

zones. Immediately below the lip are a series of stylized cicada forms, resting upon a band of much dissolved *t'ao-t'ieh* masks. On the swelling body are more clearly defined *t'ao-t'ieh* composed of *k'uei* dragons. The deep foot of the vessel is occupied by more *t'ao-t'ieh*, these being of the bovine type. The background is everywhere occupied by scrolls and squared spirals. The ornament is divided vertically into three equal parts, each division being marked by a bovine mask in full relief.

Green and red patina, mainly smooth, but with areas of brightly coloured incrustation.

First Phase. Shang-Yin or Early Chou period, probably the former.

Inscription: A figure of a tortoise, from the head of which rises a rod supporting a V-shaped receptacle; around the rod is coiled a snake.

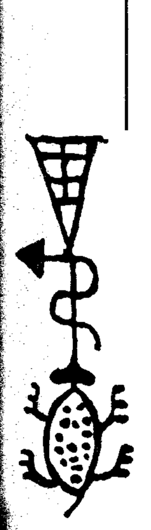


Fig.12

This device occurs as a decorative motive on the socketed celt A.21. It is recorded in several repertories of bronze inscriptions, e.g. in Liu T'i-chih, *Hsiao-chiao-ching-ko*, VI, 32, 33 and Lo Chên-yü, *San tai*, II, 12, and it appears on a series of nine vessels and three weapons, reported as found together at An-yang, and discussed by Karlgren (*Some Early Chinese Bronze Masters*, *BMFEA*, No.16 (1944), p.13 and pls.8 and 9). Three of these, a *ting* and two celts, were also published in Huang Chün, *Yeh chung p'ien yü*, I, i, 10 and I, ii, 11. Some ingenious explanations of this device have been proposed, but its real meaning is not known. The extraordinary longevity of the tortoise and its peculiar structure and habits doubtless excited the wonder of the ancient Chinese and led to the attribution to it of magical powers. Tortoise-shell may well have been considered a more potent medium for divination than bone, and its comparative scarcity would be the reason why the oracular sentences inscribed on tortoise-shell are so much rarer than those on bone. The association of snakes and tortoises in Chinese thought has persisted down to modern times. The genital organs of the tortoise being concealed from view led to the belief that all these creatures are female and reproduce their kind by mating with snakes (cf. A.58, 61 and 85).

A.12 PLATE XI

WIDE VESSEL WITH CONTRACTED NECK, *P'OU*

Height 8 inches (20·3 cm), width 11⅜ inches (28·9 cm)

The shoulder and body are each occupied by three partly dissolved *t'ao-t'ieh* in low relief. Those on the shoulder are separated by three naturalistic masks of bovine type modelled in high relief. The foot-rim carries a band of squared spirals. In the interior of the base is a stylized figure of a tortoise 4 inches long.

Dark green patina with brighter patches.

First Phase. Probably Early Chou period.

A.13 PLATE XII

CHARIOT FITTING

Height 8½ inches (21·6 cm)

The object consists of a tube, roughly oval in section, expanding at its upper extremity into a flange with upturned edge. From the front of this rises a thin rectangular plate.

Both the tube and the plate are ornamented with *t'ao-t'ieh* masks partly composed of the bodies of *k'uei* dragons.

Green and greyish green patina.

First Phase. Shang-Yin or Early Chou period, probably the latter.

Similar specimens are illustrated in Umehara, *Shina Kodo Seikwa*, Part III, Vol.I, pl.22, in Ch'ên Mêng-chia, *Hai-wai Chung-kuo t'ung ch'i t'u lu*, pl.86, and in Karlgren, *The Pillsbury Collection*, pls.88 and 89.

An almost identically similar specimen excavated from the Wei State tombs at Hsün Hsien (Hsin Ts'un) is illustrated and discussed in Sun Hai-po, *Hsün Hsien i ch'i*, 1937, ff.51, 52, where it is called a *chien* 鐧.

This term is defined in the *Shuo wên* (compiled in the Iron Age) as a 'hub-iron'. Ch'ên and Sun quote the *Shih ming*, a Han dynasty glossary, for the explanation that *chien* is something that separates the chariot and the hub and prevents their rubbing against each other, which could hardly apply to this object. Karlgren calls it a pole socket and the oval section of the tube certainly seems more fitted to receive the pole than the axle.

A.14 PLATE XII

AXLE-CAP AND LINCH-PIN

Length 5⅛ inches (13 cm)

The axle-cap is of slightly tapering, cylindrical form, and without ornament apart from a collar midway along its length. The linch-pin bears a vigorous feline mask.

An identically similar specimen, perhaps from the same chariot, is in the British Museum.

Very smooth, pale green patina.

Chou period.

A.15 PLATE XII

AXLE-CAP AND LINCH-PIN

Length 5¾ inches (14·5 cm)

The axle-cap is of slightly tapering, cylindrical form, ornamented with four horned *t'ao-t'ieh* on a ground of squared spirals. The circular end of the cap carries a design of coiled serpentine forms, and the linch-pin terminates in a horned animal mask, perhaps that of a ram.

Green patina with some incrustation.

First Phase. Early Chou period.

A.16 PLATE XIII

JINGLE, PROBABLY FOR ATTACHMENT TO CHARIOT

Height 6½ inches (16·5 cm)

The upper, circular part is hollow and contains a loose bronze bullet. The lower, quadrangular portion is ornamented with small diamond-shaped figures in relief.

Light green patina with incrustation.

Chou period.

In the *K'ao ku t'u*, X, 21, and the *Hsi Ch'ing hsü chien*, XVII, 49–51, such objects are called *wu nao* 舞鐃, rattles used in the dance. An almost identical specimen was, however, excavated from a Hsün Hsien (Hsin Ts'un) tomb, and is illustrated and discussed in Sun Hai-po, *Hsün Hsien i ch'i*, f.61, where it is called a *luan* 鑾, 'chariot jingle'. The tombs are Wei State tombs of the Chou dynasty (see page 8), and contained many other remains of chariots.

A.17 PLATE XIII

SOCKETED STAFF-HEAD

Height 5¾ inches (14·5 cm)

The cylindrical tube, tapering slightly towards the top, is surmounted by a head with large horns carrying a design of spirals. On each side is a *t'ao-t'ieh* mask.

A narrow zone of squared spirals encircles the base of the tube, which is perforated, about half-way up on one side, for a nail to secure the staff in the socket.

Rich green patina throughout.

First Phase. Probably Shang-Yin period.

A nearly identical specimen is illustrated in Huang Chün, *Yeh chung p'ien yü* (Antiquities from An-yang), III, ii, 20.

A.18 PLATE XIII

TUBE SURMOUNTED BY FIGURES OF TWO HARES

Length 5¼ inches (13·2 cm)

The animals crouch back to back.

Green patina with incrustation.

First Phase. Shang-Yin or Early Chou period.

Two bronzes, each composed of a pair of hares similarly disposed but resting upon a small oblong base instead of a tube, are in the von der Heydt Collection at the Buffalo Museum of Science.

A.19 PLATE XIV

SOCKETED DAGGER-AXE, *KO*

Length 7 inches (17·8 cm)

On each side of the blade an eye is represented, and on each side of the tang a cicada in outline relief. The sunken parts of this design probably once held turquoise inlay.

A fully hafted dagger-axe is represented in the inscription on A.3.

Fine green and bluish patina.

First Phase. Shang-Yin or Early Chou period.

A.20 PLATE XIV

SOCKETED AXE

Height 4⅛ inches (10·6 cm)

On the front a bovine *t'ao-t'ieh* in high relief; on the back a similar mask in intaglio; on each side a *k'uei* dragon. A concave section of the blade contains a device somewhat resembling a swooping bird. Cf. that on A.5.

Green patina with incrustation.

First Phase. Shang-Yin or Early Chou period.

A.21 PLATE XIV

SOCKETED CELT

Height 6 inches (15·2 cm)

The implement has slightly tapering sides and a rounded cutting edge. Design in relief, probably originally filled with turquoise or other inlay. On the sides *k'uei* dragons and cicadas; on the front and back the snake and tortoise device as inscribed on A.11.

Green and reddish patina.

First Phase. Shang-Yin period.

Illustrated and discussed in Karlgren, *Some Weapons and Tools of the Yin Dynasty*, in *BMFEA*, No.17 (1945), p.103 and pl.4, and Seligman, *Chinese Socketed Celts*, in *Antiquity*, XII (1938), pp.86, 87. The object is also illustrated in Huang Chün, *Yeh chung p'ien yü*, I, ii, 11.

A.22 PLATE XIV

FRAGMENT OF FITTING

Length 3¾ inches (9·5 cm)

One of two fragments of nearly equal length, originally joined and forming part of a frieze. On each is an elongated and very vigorous *k'uei* dragon in relief. The complete frieze may have comprised a procession of these creatures.

First Phase. Shang-Yin or Early Chou period.

A.23 PLATE XV

BELL, *CHUNG*

Height 5½ inches (14 cm)

The bell is bi-elliptical in section, has an arched rim, and is suspended by a plain loop, through which are two vertical perforations. On each side are eighteen curl-shaped projections in horizontal groups of three. Between the groups are panels containing dissolved animal forms, and below them a simplified *t'ao-t'ieh* mask.

Smooth bluish green patina.

Second Phase. Mid-Chou period.

Inscription: To the right of the mask on one side only, a pictogram representing a long-tailed bird, *niao* 鳥, perhaps a family crest or emblem.

A.24 PLATE XV

BELL, *CHUNG*

Height 5⅞ inches (14·8 cm)

The bell is bi-elliptical in section, and is made to be suspended by the ornament at the top, formed of two confronted tigers, their heads being joined by a transverse bar. The surface is divided into a number of panels, horizontal and vertical. Twelve of these (six on each side) are each occupied by three rounded bosses. The rest of the surface is covered with a design of interlaced serpentine forms.

Each of the rounded bosses has a granulated ground on which is the vestige of an animal form. On a bell of similar type, but 22 inches high, in the Stoclet Collection (*International Exhibition, London, Cat.* No.181) the design on the bosses is seen to portray a monster devouring a goose, as in A.30 of this collection. It is therefore probable that the design on the bosses of the smaller bell is intended to be a reduced and simplified version of the same theme.

Greenish blue and bluish green patina.

Third Phase. Late Chou period.

In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.76).

A bell of identically similar design, 8⅝ inches high and probably one of the same set, is illustrated and described in Karlgren, *The Pillsbury Collection*, pp.165, 166.

A.25 PLATE XVI

WINE VESSEL, *HU*

Height 9¾ inches (25 cm)

The upper zone of decoration is occupied by a row of large stylized cicadas, below which are pairs of coiled dragons with horns and open jaws, back to back. The lower zone contains a complex of intertwined serpentine forms terminating in the heads of birds and dragons. On the shoulders ring handles incorporating animal heads, and on the body a small bovine mask in relief.

A light green patina covers most of the surface.

Early Third Phase. Chou period.

Illustrated in Koop, *Early Chinese Bronzes*, pl.44, and in Jung Kêng, *Shang Chou i ch'i t'ung k'ao* (Bronzes of Shang and Chou), pl.799, where the vessel is referred to as a *p'ing* 鉼. A similar vessel is figured in the *Po ku t'u lu*, X, 37, and described as a *yu* 卣.

A.26 PLATE XVII

LOWER PART OF RECTANGULAR FOOD VESSEL, *FU*

Length 12⅝ inches (32 cm)

The decoration on the sloping sides and the base consists of a repeat design of interlaced serpentine forms with birds' heads. On the perpendicular rim is a series of short rising blades of simplified cicada form. There are two loop handles surmounted by bovine masks.

Smooth bright green patina inside the vessel; dull green and red patina outside.

Third Phase. Late Chou period.

A.27 PLATE XVIII

WINE VESSEL, *HU*, IN THE FORM OF A GOURD

Height 12⅝ inches (32 cm)

The cover, in the form of a bird, is attached by a chain to the handle. The upper mandible of the bird is hinged, so that the beak may be opened for pouring.

The body of the vessel is undecorated, apart from three parallel bands of squared spirals in low relief. The foot-rim has the form of a twisted cord.

Smooth green patina with patches of brighter green and red.

Style of the Late Chou period.

A.28 PLATE XIX

DOUBLE-EDGED SWORD, *CHIEN*

Length 14⅜ inches (36·5 cm)

Inscription inlaid in gold and silver.

Red and green patina.

Fourth or third century B.C.

Sword inscriptions have not been extensively studied and present special problems of terminology. Many Chinese repertories of bronze inscriptions include examples from swords, but when readings are appended, those for the more obscure passages are rarely acceptable. An inscription closely similar to that of A.28 is recorded in Tsou An, *Chou chin wên ts'un*, VI, 91, but the readings proposed by the author for some of the characters are speculative.

In this inscription five characters (underlined below) are inlaid in gold and the

remainder in silver. The following are a tentative decipherment and translation:

王立事歲賜命谺卯
左軍師司馬命得執齊

'In the year when the king established the government he conferred on Ch'u Mao the dignity of Marshal of the Army of the Left, enjoining him to maintain impartiality.'

The least satisfactory part of this reading is the last four characters. They comprise a formula found at the end of several recorded sword inscriptions, but readings suggested by different authors have varied widely. Most, including Lo Chên-yü in *Chên sung t'ang chi ku wên*, XII, 20–2, equate the last character with 齋, recognized as equivalent to 齊 *ch'i*, 'level, equal', and also the name of the Ch'i State. An alternative favoured by Tsou An (as above) and others is 僉 or 劍 *chien*, 'sword', but the character occurs on weapons other than swords and the recognized ancient forms of *chien* are in fact quite different.

There remains the question of the identity of the king. Close resemblance between this inscription and others in which the name 郾王, 'King of Yen', occurs indicates that the sword may be plausibly identified with the same person (Cf. Liu T'i-chih, *Hsiao chiao ching ko*, X, 102, and Lo Chên-yü, *San tai*, XX, 44, 45). This Yen was the name of a district in Ho-nan, but the character is also equated with 燕, the name of the Northern Yen State, whose capital stood near the site of the present city of Peking.

A.29 PLATE XIX

TALLY IN THE FORM OF A CROUCHING TIGER

Length 3 inches (7·5 cm)

The two halves of the tally are brought into correct apposition by means of three triangular lugs on the inner side of one half, which are made to fit into corresponding slots in the other. There is an inscription of eight characters along the animal's back and across the join of the two halves, and another of three characters on the left side.

Green patina in patches.

Han period.

A tally almost identically similar, apart from the inscription, is illustrated in Yetts, *Eumorfopoulos Catalogue*, II, pl.LXV, B.284 and 285, and discussed on p.78 of that work.

Inscriptions: Eight characters on the back reading, in current script, 與東郡太守爲虎符 'Tiger tally for Governor of Tung Chün'. In the Han period the country was divided into *chün*, or commanderies. The Tung (Eastern) Commandery comprised territory in the south of Ho-pei and north of Ho-nan.

Three characters on the side, 東郡左 'Tung Chün; left'.

Numerous comparable inscriptions are recorded in Liu T'i-chih, *Hsiao-chiao-ching-ko*, XIV, 90 ff.

A.30 PLATE XIX
WEIGHT IN THE FORM OF A MONSTER DEVOURING A GOOSE
Diameter $3\frac{1}{8}$ inches (8 cm)

These weights are supposed to have been used to keep grave-clothes in position. The present specimen has a pair of holes which join below the monster's neck, and through which a cord may have been passed. For the design cf. the bosses on the bell, A.24.
Patches of green patina.
Late Chou period.
Illustrated in Koop, *Early Chinese Bronzes*, pl.XLIII, where it is ascribed in error to the Musée Cernuschi, Paris, at which it was exhibited.

A.31 PLATE XX
CURVED KNIFE WITH HILT TERMINATING IN AN ANIMAL'S HEAD
Length $9\frac{7}{8}$ inches (25·1 cm)

The head is that of a cervine, the two horns being connected by a button at the middle of their curves. The handle is decorated with ribbons of herring-bone and zig-zag patterns, perhaps conventional representations of hair on the animal's neck. A small thorn-shaped guard separates the blade from the handle.
Smooth green patina.
Knives of this type, of which the present is an unusually fine specimen, have been found at various places in the Northern Steppe, especially at Minussinsk, Siberia, and for long were regarded as a characteristic product of the nomad culture. They have been variously ascribed to dates between 500 B.C. and A.D.1000 (see Salmony, *Sino-Siberian Art*, pp.85, 86 and pl.XXXVI). But more recently identically similar knives have been found in Chinese graves of the second millennium B.C. at An-yang. Drawings of these graves with contents *in situ* may be seen in Shih Chang-ju, 'Recent Discoveries at Yin-hsü, Anyang' (in Chinese), in *The Chinese Journal of Archaeology*, No.2 (1947), pp.19, 50, 68, and pl.XI. The subject has also been discussed by Yetts, 'Notes on Some Chinese Bronzes', in *TOCS*, Vol.19 (1942–3), pp.53–5. It is, therefore, apparent either that the type derives from China, or that it originated elsewhere much earlier than had been supposed.

A.32 PLATE XX
DAGGER
Length $8\frac{5}{8}$ inches (22 cm)

The tapering blade is double-channelled. The handle is perforated throughout its length by a series of five transverse slots, through which a textile grip could have been threaded. The decoration consists of a symmetrical arrangement of interlocked fillets.

At the top and bottom they form *t'ao-t'ieh* masks; between the two masks the fillets terminate in confronted heads of felines and birds.
Third Phase. Late Chou period.
This type has also been found at Minussinsk (see Salmony, *Sino-Siberian Art*, pp.88–90 and pl.XXXIX).

A.33 PLATE XX
KNIFE WITH RING-TOPPED HANDLE
Length $9\frac{1}{2}$ inches (24·1 cm)

The knife is straight and tapers only slightly throughout its length. The oval ring is formed of the bodies of two confronted dragons, whose tails join above their heads. The blade is a continuation of the handle, which carries a design of S-shaped spirals.
Light green patina.
Han period or earlier.
Cf. Karlbeck, *Selected Objects from Ancient Shou-chou*, in *BMFEA*, No.27 (1955), p.74 and pl.XV.

A.34 PLATE XX
CURVED KNIFE
Length $7\frac{1}{2}$ inches (19·1 cm)

The handle terminates in an animal's head, the horns of which may have formed a loop, but have been broken off. Knives of this simple but convenient and elegant form have been found at the Shang-Yin Dynasty sites at An-yang and as far north as Minnussinsk, Siberia. The region whence the design originated has not yet been determined.
Period doubtful.

A.35 PLATE XXI
PLAQUE, PERHAPS A HARNESS ORNAMENT
Height $7\frac{7}{8}$ inches (20 cm)

On the front are two bovine masks in relief: on the back three loops for fastening.
Warm reddish patina with patches of green.
Second Phase. Mid-Chou period.
For similar specimens see *The Exhibition of Early Chinese Bronzes*, in *BMFEA*, No.6 (1934), pl.XXVI, and Umehara, *Shina Kodo Seikwa*, Part III, Vol.II, pl.121 (Wannieck Collection), where they are attributed to seventh–third century B.C.

A.36 PLATE XXI
PAIR OF UNIDENTIFIED OBJECTS
Length $4\frac{5}{8}$ inches (11·7 cm)

The design is of intertwined animal elements, which would combine to form a *t'ao-t'ieh*. There are loops at the back for attachment, perhaps to harness.
Green and blue patina.
Second Phase. Mid-Chou period.

A.37 PLATE XXI
BIT WITH TWO CHEEK-PIECES
Width of cheek-pieces $3\frac{3}{4}$ inches (9·5 cm)

The cheek-pieces carry a design derived from the coiled body of a dragon or serpent.
Light green patina with incrustations.
Second Phase. Mid-Chou period.

A.38 PLATE XXII
BUTT FOR THE HAFT OF A DAGGER-AXE, *KO*
Length $6\frac{3}{4}$ inches (17 cm)

The lower portion is octagonal in section and terminates in a kind of hoof. The upper portion is a hollow tube of oval section like the socket of A.41.
The figure of a bird is modelled in relief around the central part of the handle. Its plumage is represented by spirals, scales, curls, and volutes. On the tube above the bird is a pattern of incised spirals. Below the bird is a similar pattern with some larger cavities that may have held inlay.
Silvery grey patina with patches of blue and green incrustation.
Third Phase. Late Chou period.
In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.100).
Illustrated in J. G. Andersson, *The Goldsmith in Ancient China*, pl.IX, 2. Cf. Karlbeck, *Selected Objects from Ancient Shou-chou*, pp.69, 70 and pl.XII; also *Ch'u wên wu chan lan t'u lu* (Peking: 1954), pl.43, which shows a complete *ko* excavated at Ch'ang-sha, with wooden haft, haft-ornament in the form of a bird, blade, and butt.

A.38a FIGURE 13
UNIDENTIFIED OBJECT
Height $5\frac{3}{4}$ inches (14·7 cm)

The base is in the form of a hollow rectangle, on opposite sides of which stand the heads of a bird and a dragon or tiger. From the jaws of the latter proceeds the long neck of another bird, terminating in the small head which supports a deep cup. The surface is

covered with a pattern of spirals and volutes in low relief.
Green and blue patina.
Third Phase. Late Chou period.

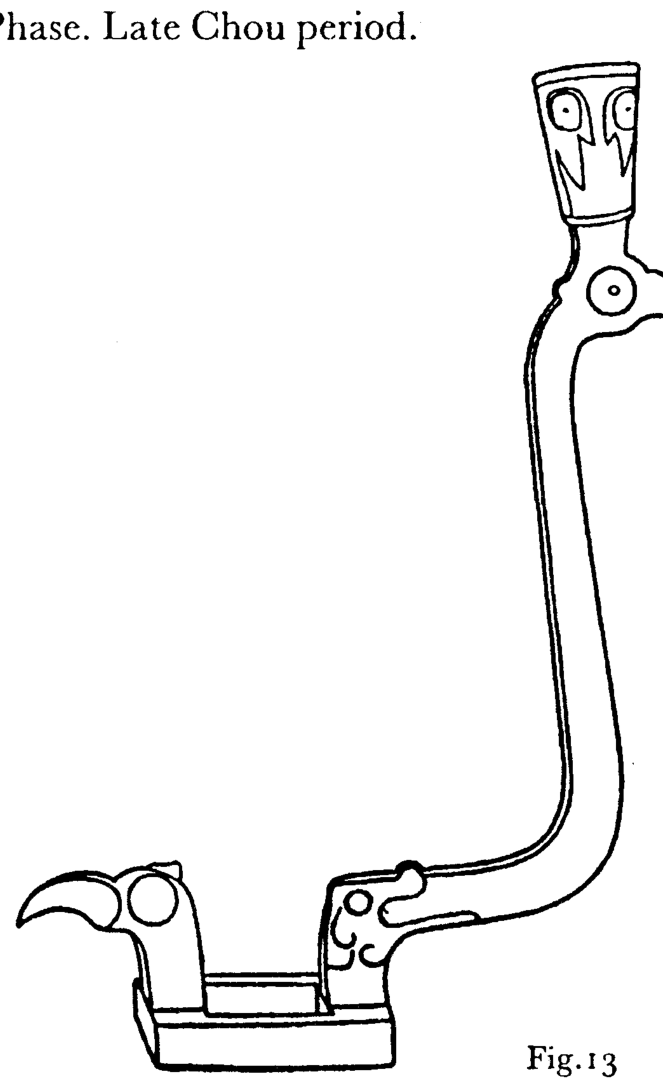


Fig.13

A.39 PLATE XXII
FIGURE OF RECUMBENT FELINE WITH ELONGATED NECK
Height $2\frac{3}{8}$ inches (6 cm)

The body is ornamented with curls, scales, and granulations. The head is raised in an attitude of alert expectancy. The lower part of the casting forms a process by which the bronze was attached to some other material, or made to serve as a linch-pin.
Third Phase. Late Chou period.

A.40 PLATE XXII
UNIDENTIFIED OBJECT IN THE FORM OF A TUBE OF OVAL SECTION TERMINATING IN A BIRD'S HEAD
Length $3\frac{1}{2}$ inches (9 cm)

The decoration consists of spirals and blades in low relief. The object has been regarded as the finial of a staff, or as part of a loom.
Probably Late Chou period.
Cf. Karlbeck, *Selected Objects from Ancient Shou-chou*, p.108 and pl.XLIII, 6.
Mr Karlbeck suggests, in a letter, that it is perhaps the terminal of a rib of a chariot-umbrella: in this case the hook on the bird's back would hold the detachable

umbrella-cover taut and in position. Many such umbrellas may be seen on chariots in Han Dynasty bas-reliefs.

Another specimen is illustrated in Yetts, *Eumorfopoulos Catalogue*, II, pl.LIV, B.230. The author remarks (p.72) that such objects probably served as finials for staffs used in the furniture of tombs to support canopies or other hangings, and that the hook on this type probably served to take a loop of the hangings.

A.41 PLATE XXII

ORNAMENT IN THE FORM OF A HAWK FOR THE HAFT OF A DAGGER-AXE, *KO*

Length 5¼ inches (13·3 cm)

The figure of the bird is cast with a socket shaped to receive the upper end of the haft. The latter would have been of oval cross-section with the narrower end of the oval next to the pointed blade of the weapon and the broader end next to the tang. Thus in the heat of battle, or even in the dark, the soldier was kept constantly aware, by the feel of the haft, of the position of the blade and tang. Note that the socket of the weapon itself, as in A.19, and of the butt or ferrule, as in A.38, are of similar cross-section. A fully hafted dagger-axe is depicted in the inscription on A.3. The choice of the hawk as an ornament was doubtless dictated by considerations of sympathetic magic. Being proverbially keen-sighted and deadly in its aim, its figure could be expected to endow the weapon with qualities of accuracy and deadliness.

Green patina.

Third Phase. Late Chou period.

Illustrated in Umehara, *Shina Kodo Seikwa*, III, i, pl.63.

For a discussion of haft ornaments see Yetts, *The Cull Chinese Bronzes*, pp.95–105.

A.42 PLATE XXIII

WINE JAR, *HU*

Height 12½ inches (31·8 cm)

The shape swells out from the narrow neck to a bulbous body, double-elliptical in horizontal section, which contracts again above the splayed foot-rim. The only ornament is the V-shaped device below the mouth at each side. At the shoulder are two loose rings for lifting.

Light green patina with darker patches.

Han Dynasty or earlier.

Inscription: The five characters which lie on their sides along the foot-rim, read in current script 君子之奉壺, 'presentation [wine-]jar for the noble and honourable'. The first two characters, *chün tzŭ*, form the term translated 'the superior man' in Legge's *Chinese Classics* and 'the gentleman' by Arthur Waley. The *chün tzŭ* was the Confucian ideal, the scholar-statesman without fear and without reproach.

A.43 PLATE XXIV

BELT HOOK, *TAI KOU*

Length 8¾ inches (22·2 cm)

A massive hook tapering towards the neck and terminating in an animal head. The geometrical design contains the remains of gold, silver, and turquoise inlay.

Probably Han period.

The belt hook, which was a conspicuous feature of ancient Chinese costume from the third century B.C. onward, consists essentially of a plaque of bronze, iron, or jade, furnished with a button for attachment to one end of the belt and a hook devised to engage with a ring at the other. In many cases the plaque is arched to conform with the shape of the wearer's abdomen, and narrows towards the hooked end which may be plain or, more often, in the shape of an animal's head. Belt hooks appear to have been adopted by the Chinese, together with other items of clothing and equipment, from their northern nomadic neighbours in the closing centuries of the Chou Dynasty. An early representation, perhaps the earliest extant, of a Chinese belt hook in use may be seen on a bronze statuette in the Chin Ts'un find, believed to date from that period (White, *Tombs of Old Loyang*, pl.LXXVIII). Some belt hooks carry decoration of the Third Phase of bronze design, but none can be positively associated with earlier phases. They range in size from that of A.43 and A.45, or even larger, to that of very small specimens such as A.49. These latter may have been used to suspend equipment from the belt or harness, rather than to join the ends of the belt itself. Some belt hooks, so called, may have served to hold together other parts of the ancient costume. At the present day a similar hook is used to join at the wearer's shoulder the two ends of the *kāsāya*, the robe prescribed for the use of Buddhist monks.

The proportions and decorative designs of belt hooks vary widely. Apart from styles peculiar to period or region of manufacture, it is probable that certain types were the prerogative of particular grades of officials, social classes, and the male and female sexes respectively, and that others were appropriate to special circumstances or ceremonial occasions. Being worn conspicuously before vital parts of the body the belt hook provided an eminently suitable vehicle for amuletic symbols, animals of good augury and the like, and these are common features of the decoration. The inscription on A.46 indicates one way in which it was sought to endow these objects with protective power.

A.44 PLATE XXIV

BUTT FOR THE HAFT OF A DAGGER-AXE, *KO*

Length 5 inches (12·7 cm)

The socket, like those of A.38 and A.41, is of oval section. The inlaid decoration consists of silver plates cut to the required shape and hammered into the corresponding recesses in the cast bronze. The design is zoomorphic, but the animal forms, those of dragons or felines, are so stylized as to be barely recognizable.

Third Phase. Late Chou period.

Similar inlaid designs on *ko*-butts, in a somewhat less advanced stage of stylization were illustrated and discussed by Andersson in *The Goldsmith in Ancient China*, pp.14, 15 and pls.XII and XIII. For others see Karlbeck, *Selected Objects from Ancient Shou-chou*, p.73 and pl.XIV; also *Ch'u wên wu chan lan t'u lu*, pl.42, which shows a similar fitting with the remains of a wooden haft, excavated at Ch'ang-sha.

A.45 PLATE XXIV

BELT HOOK, *TAI KOU*

Length 9¾ inches (24·8 cm)

The proportions are unusually long and narrow. The open-work design, inlaid with turquoise, comprises a fish between two confronted birds with extended necks and long tails. This motive is repeated at the lower extremity, which terminates in the figure of a swallow. A rare and beautiful specimen.

Probably Han period.

A similar belt-hook is illustrated in Umehara, *Shina Kodo Seikwa*, Part III, Vol.I, pl.66, and there dated sixth–second century B.C.

A.46 PLATE XXIV

BELT HOOK, *TAI KOU*

Length 5½ inches (14 cm)

The belt hook is of rounded section, undecorated, but terminating in an animal head. There is a large stud at the back for attachment, and an inscription of five characters.

Smooth green and red patina.

Perhaps Han period.

Inscription: In current script, 五月丙午作 'Made on a *ping-wu* day of the fifth month'.

This was a 'magic' hook, to be worn as an amulet as well as for its practical purpose. Wang Ch'ung (second century A.D.) in *Lun Hêng* (*Shuai hsing p'ien*) prescribes noon on the cyclical day *ping-wu* of the fifth month as the correct time for casting *yang-sui*, burning mirrors, with which to obtain fire from the sun. The Taoist writer Ko Hung (fourth century A.D.) in *Pao p'u Tzŭ* (*Têng shê p'ien*) gives the same prescription for casting swords. For an inscription on another clothing hook using this formula see Jung Kêng, *Ch'in Han chin wên lu*, VI, 10.

The idea seems to have been that the capacity for storing heat and protective power would be greatest in implements cast at midsummer, when the influence of the *yang* element in nature (pertaining to Heaven, the sun, the male principle, etc.) was at its zenith. The *ping-wu* day, since it recurred only at sixty-day intervals, would not necessarily fall near the solstice, nor indeed in every fifth month, but the combination *ping-wu* had a similar mystic significance, since *ping* had associations with fire and the south, and *wu* also meant 'noon'. Inscriptions are found on mirrors and hooks to the effect that they were made on a *ping-wu* day, without reference to the month.

A.47 PLATE XXV

BELT BUCKLE

Length 3¼ inches (8·2 cm)

The open-work design is composed of the entwined bodies of two dragons, the scales of which are represented by spirals and granulation. A pin projects from the front and there is a stud at the back.

Dark green patina.

Third Phase. Late Chou period.

A.48 PLATE XXV

BELT HOOK, *TAI KOU*

Length 3⅜ inches (8·5 cm)

The hook has a short stem and an oval body covered with an asymmetrical design in relief incorporating the head of a bear or fox. There are remains of gilding.

Green patina.

Han period or earlier.

Cf. White, *Tombs of Old Lo-yang*, p.92 and pl.LVIII.

A.49 PLATE XXV

CLOTHING HOOK

Height 1¼ inches (3·3 cm)

The shape is that of an elephant's head with uplifted trunk. The head projects from a large stud for attachment to the belt or garment.

Third Phase. Late Chou period.

Cf. others in Karlbeck, *Selected Objects from Ancient Shou-chou*, pp.83, 84 and pl.XXI.

A.50 PLATE XXV

CIRCULAR BUTTON

Diameter 1⅛ inches (2·9 cm)

The mask and forequarters of a bear are cast in relief. At the back of the button are two rings for attachment. There are traces of gilding.

Probably Han period.

A.51 PLATE XXV

BELT HOOK, *TAI KOU*

Length 4⅜ inches (11·2 cm)

The proportions are unusually long and narrow. The decoration consists of double spirals, and the hook terminates in the head of a goose or swan. The back is slightly concave.

Smooth silvery patina.
Han period.
Cf. Karlbeck, *Selected Objects from Ancient Shou-chou*, p.93 and pl.XXVIII, 8.

A.52 PLATE XXVI
CYLINDRICAL CUP, PROBABLY A SHEATH FOR STAFF OR STANDARD
Height $4\frac{1}{8}$ inches (10·4 cm)

Inlaid with silver, and perhaps with other materials. The decoration is a complex of bird and vegetal forms, highly stylized.
Green, red, and blue patination.
Han period or later.
Cf. a similar but taller specimen in Yetts, *Eumorfopoulos Catalogue*, I, A.99 and 100. Reference is there made to the Ch'ing imperial catalogue of bronzes, *Ning shou chien ku*, XIV, 19 and 20, where these objects are called *chang tui* 仗鐓, 'butts of weapons'.

A.53 PLATE XXVI AND FIGURE 15
RECTANGULAR FITTING
Length 5 inches (12·6 cm)

In the middle is a loop to hold a ring, and on the back three lugs for attachment, probably to a chest or coffin. The decoration is a complex of spirals with traces of inlay.
Blue and green patina.
Late Chou or Han period.

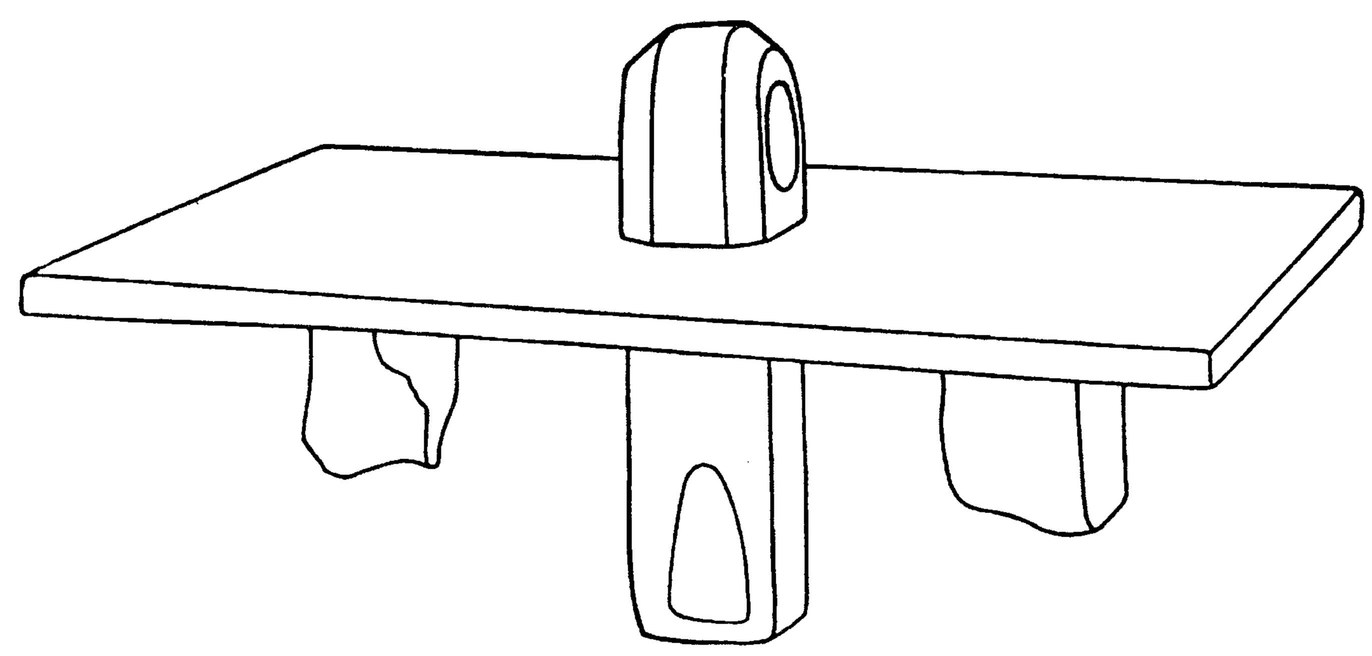


Fig.15

A.54 PLATE XXVII
WINE JAR, *HU*
Height 9 inches (22·9 cm)

The only ornament consists of three plain horizontal bands and two small animal masks, all in low relief.
Smooth brown and green patina.
Han period.
Illustrated in Koop, *Early Chinese Bronzes*, pl.54.
A similar jar, with an inscription which included a date corresponding to 41 B.C., was excavated at Lo-lang, Korea. See Sekinō, *Rakurō gun jidai no iseki*, pls.176, 177.

A.55 PLATE XXVIII
BASIN, *HSI*
Diameter $8\frac{1}{4}$ inches (20·6 cm)

On the outside are two animal masks and four ridges circling the vessel horizontally. In the interior, on the base, is a figure of a horned sheep in raised outline with the characters *chi yang*, 'lucky ram', a rebus for *chi hsiang*, 'good luck and happiness'.
Green patina with russet patches.
Han period.
Similarly decorated and inscribed basins are figured in Jung Kêng, *Ch'in Han chin wên lu*, V, 22, 23.

A.56 PLATE XXIX
WINE VESSEL IN THE FORM OF A CORMORANT
Length $12\frac{3}{4}$ inches (32·4 cm)

Around the bird's neck is a cord, as when the cormorant is used by the Chinese for fishing. The vessel rests on four feet, the front pair representing two chicks, and the hind pair the feet of the bird itself, conventionalized. A third chick forms the handle of the cover that closes the opening on the bird's back, through which the vessel is filled. The cormorant does, in fact, carry its young on its back.
Green and brown patina, incrusted in parts.
Han period.
There is an inscription on the under-side of the cover. It does not accord with the style and period of the vessel, and is evidently a later and spurious addition.

A.57 PLATE XXIX
COOKING VESSEL, *CHIAO-TOU*, IN THE FORM OF A BIRD
Length $8\frac{5}{8}$ inches (22 cm)

The body consists of a plain, circular bowl, from which protrude on each side handles

for lifting, one in the shape of a swan's neck and head, the other a fan-like projection representing its tail. The vessel stands on three legs like those of the bird, terminating in webbed feet.
Green patina with incrustations.
Han period or somewhat later.

A.58 PLATE XXX
BRAZIER, *WÊN LU*
Length $5\frac{3}{4}$ inches (14·5 cm)

The base is rectangular: it is supported by four small anthropoid figures and a projection from the centre of the grid which forms the bottom of the brazier. The part above the base is oval in shape, and has a pierced design representing the *Ssŭ shên*, Four Supernatural Beings (Green Dragon of the East, Red Bird of the South, White Tiger of the West, and Sombre Warrior [Tortoise] of the North). On the rim are four small projections designed to fit cavities in the base of a dish. A handle, which projected from the base below the figure of the tortoise, is missing.
Perhaps Han period.
The type is illustrated in the *K'ao ku t'u*, X, 14.
The concept of the Four Supernatural Beings, or Animals of the Four Quarters, appears to have crystallized in the second century B.C., or somewhat earlier, and the group occurs frequently as a decorative motive in the Han Dynasty, especially on the backs of mirrors (cf. A.61 and 63). The creatures represent respectively the scaly, feathered, hairy and shell-covered members of the animal kingdom, and are associated not only with the four directions, but also with the four seasons – spring, summer, autumn, and winter – and the four elements – wood, fire, metal, and water. A fifth animal, the Yellow Dragon, is sometimes included in the group to symbolize the centre, and the element earth. The tortoise is usually represented with a snake coiled upon its carapace, as in A.85. Here the coils of the snake extend onto the longer sides of the brazier. The association of snakes and tortoises in Chinese thought is very ancient, as is evidenced by the device on A.11 and 21.
See W. Cohn, *The Deities of the Four Cardinal Points in Chinese Art*, in *TOCS*, Vol.18 (1940–1), pp.61–75, in which this brazier is referred to and a complete specimen is illustrated.

A.59 PLATE XXXI
MIRROR
Diameter $5\frac{1}{2}$ inches (14 cm)

The central boss, perforated for the attachment of a silken cord, rests upon a rosette of four pointed petals, and is surrounded by a square zone containing an eight-character inscription in a fancy style, reading in current script 見日之光天下大明, *Chien jih chih kuang, tien hsia ta ming*, 'When the sun shines, the whole world is bright'.

Beyond this is a symmetrical arrangement of heart-shaped petals, comma-shaped leaves and pairs of brush-like petals separated by small bosses. The whole is surrounded by a raised rim of concatenated arcs.
Early Han period (second or early first century B.C.)
Cf. Karlgren, *Huai and Han*, *BMFEA* No.13 (1941), Mirror No. K.6 and others in the K Category, p.111 and pl.76.
Mirrors with this and similar inscriptions are known as *jih kuang*, 'sunshine', mirrors. It was believed that mirrors stored sunshine, and dispensed it as required.

A.60 PLATE XXXI
MIRROR
Diameter $5\frac{3}{4}$ inches (14·7 cm)

The central boss rests on a rosette formed of four pointed petals, separated by four characters in a fancy script. This is surrounded by a ring of concatenated arcs, and another of the forms called by J. G. Andersson 'volute and triangle', probably derived from the heads and beaks of birds.
Most of the silvery reflecting surface is intact, but the decorated back has much greenish incrustation showing in places the impression of the fabric in which the mirror was wrapped.
Han period.
Inscription. The characters read in current script 長宜子孫, *Chang i tzŭ sun*, 'May you have a long succession of sons and grandsons'.

A.61 PLATE XXXII
MIRROR
Diameter $6\frac{1}{4}$ inches (16 cm)

The central boss rests upon a rosette, around which is a square zone containing the 'duodenary signs' separated by nipples. Outside the square is a field crowded with animal and human forms in linear relief, including fairy immortals, 'animals of the four quarters' (see p.71), forms resembling the letters T, L and V, and eight larger nipples. This is encircled by a narrow zone containing the inscription of forty-two characters, and a border of 'oblique comb-tooth pattern'. Beyond it is the thickened rim with a border of 'outward pointing saw-tooth pattern', and finally the zone containing the design known as 'drifting clouds', but almost certainly derived from much stylized animal forms.
Silvery bronze with only slight patches of corrosion.
Han or Hsin period, *c.*100 B.C.–A.D.100.
The mirror belongs to Category L in Karlgren's scheme of classification in *Huai and Han*. Mirrors of similar design are known with inscriptions associating them with the Hsin Dynasty (A.D.8–23).

The inscription is a six-line poem in three rhymed couplets. The following is a version in current script:

尙 方 佳 鏡 眞 大 好
上 有 仙 人 不 知 老
渴 汲 玉 泉 飢 食 棗
浮 游 天 下 遨 四 海
徘 徊 名 山 採 神 草
壽 如 金 石 之 天 保

'This fine Shang-fang mirror is truly excellent. Upon it are immortals who know not old age; when thirsty they drink from the jade springs, when hungry they feed on gem-like fruits. They float above the world, and roam the Four Seas. They rove among the famous peaks gathering magic herbs. May your longevity be like that of metal and stone under Heaven's protection.'

To Western students and collectors it has seemed that the most conspicuous and distinctive features of mirrors of this class are the forms resembling the letters T, L and V symmetrically placed in the main field of the decoration, and the name TLV has furnished a convenient, if unscientific, designation. Chinese writers, from the Sung cataloguers onward, have, however, ignored these forms, and have named the mirrors according to whatever other motive of the decoration struck them as conspicuous, for example, 'Twelve Asterism' mirrors, or 'Four Animal' mirrors. In *The Cull Chinese Bronzes* Yetts designated a similar specimen to our A.61 a 'sun-dial and cosmic mirror', and gave cogent reasons for doing so in a learned essay in the same volume (pp.116–65). The presence of marks resembling T, L and V on ancient sun-dials had been remarked some years earlier by Liu Fu in an article on sun-dials of the Western Han Dynasty in a Chinese periodical. The subjects of Liu Fu's study were an engraved stone dial in the Tuan-fang Collection and another in the collection of Bishop W. C. White, said to have been excavated at Chin Ts'un. Each of these dials carried T, L and V figures, disposed as on the mirrors, the uprights of the Ts and Ls marking the cardinal points, and the Vs marking the four octants between them. The explanation of their presence proposed by Liu and cited by Yetts, is that the most primitive sun-dial, which would seem to have been used for making certain astronomical observations rather than for telling the time of day, was a square of cloth or ox hide, stretched flat and placed in the equatorial plane. It is presumed that the stretching was done by pulling with hooks or other devices applied to the corners of the square and to the middles of the sides, and that the Vs and Ls represent the memory of the hooks or marks made by them. It is not, of course, suggested that the mirrors were used as sun-dials, but that the angular figures derived from the sun-dials were part of the cosmic symbolism of their designs, contrived to typify the forces that were believed to sustain the universe. An object of daily use, made of an enduring material like bronze and demonstrating by its design the equilibrium of those forces, was a talisman to keep its owner in harmony with them and enable him to partake of their stability and permanence. The inscription on the mirror describes the happy lot

of those who have freed themselves by such means from mundane limitations to enjoy the delights of the Hills of Longevity and the Isles of the Blest.

Further observations on this mirror design will be found in S. Cammann, *The 'TLV' Pattern on Cosmic Mirrors of the Han Dynasty*, in *Journal of the American Oriental Society*, Vol.68 (1948), pp.159–67.

The Shang-fang was a department charged with the supervision and expenditure of the funds of the imperial household, including the management of workshops producing objects of art and luxury for the palace. The reference to the Shang-fang does not imply that the mirror was made for imperial use, but that it was the equal in design and quality of those that were.

The central boss, besides serving to secure the cord, represents either the dome of heaven's vault, or possibly the sun poised therein, whilst the square frame is a symbol of earth. The duodenary signs are twelve characters which have been applied to various calendrical and astronomical uses. They are best known by their current name of the 'Twelve Branches'. In ancient times they were coupled in parallel sequence with another set now called the 'Ten Stems', to designate the days of the sixty-day cycle. Later, but probably not before the Christian era, the characters were similarly combined, as they still are, to name the years of the sixty-year cycle. The 'Twelve Branches' are also used to designate the months of the year and the hours of the day, each Chinese hour being of the duration of two hours of western time. In the astronomical context the duodenary signs were known as the 'Twelve *Ch'ên*', or asterisms to be observed as points of reference, and their presence on the mirror may be regarded simply as signifying twelve sectors of the sky. The characters are here written in a fancy style to accord with the spirit of the adjacent decoration.

The main zone contains a remarkable composition in thread relief, every line of which is eloquent of that ceaseless rhythmical movement, so characteristic of the best Han Dynasty figure drawing. Though it circles the mirror without interruption, it may conveniently be divided for analysis into four quarters, or quadrants. Starting at the north-east, or top right-hand corner, where the inscription also begins, and proceeding clockwise, we recognize the following:

IN THE EAST QUADRANT

A small circle enclosing a bird (cock or crow) in flight, symbol of the Sun or Sun Star.

The Green Dragon of the East

A *hsien*, or fairy immortal.

A bird resembling a pheasant.

IN THE SOUTH QUADRANT

The Red Bird of the South

Two quails.

A *hsien*, or fairy immortal, astride a galloping deer.

IN THE WEST QUADRANT

A small circle enclosing the figure of a toad, symbol of the Moon or Moon Star.

The White Tiger of the West

Three quails.

A quadruped, probably a *ch'i-lin* (see p.92).

IN THE NORTH QUADRANT

The Sombre Warrior of the North (a tortoise in the coils of a snake).

Two quails.

A *hsien*, or fairy immortal.

The 'outward pointing saw-tooth pattern', as it is called by Chinese writers, would seem in fact to depict solar rays, and to typify celestial influence directed towards terrestrial creation as represented by the dissolved animal forms in the outermost zone.

A.62 PLATE XXXIII

MIRROR

Diameter 5¾ inches (14·5 cm)

The central boss is enclosed in a square, outside which is the main field occupied by eight rosettes in the form of miniature mirrors of concatenated-arc design, spirals, TLV forms, and at the circumference an inscription of twenty characters separated by Ls and Vs into alternating groups of three and two. The characters are elongated and written in a fantastic style to accord with the spirit of the decoration and to fill the spaces reserved for them. Outside the inscription are borders of 'comb and saw teeth' and, on the rim, a design of spirals probably derived from the stylized forms of birds.

Black patina with patches of green incrustation. Cf. A.67.

Han or Hsin period.

The inscription consists of three rhymed lines, each of seven characters. One, a grammatical particle in the first line, is omitted to reduce the total to twenty and thus to allow of symmetrical arrangement. Its omission does not affect the sense. The following is a version in current script with a translation:

柒 言 紀 從 鏡 始
長 葆 二 親 利 孫 子
辟 去 不 祥 宜 賈 市

'The rule of the seven words originates from the mirrors. May your two parents be long preserved and may blessings attend your grandsons and sons! May ill-luck be averted, and may you find good markets!'

Mirrors bearing inscriptions of which the first line is as above, or a variation thereof, have been known by the names *Ch'i yen* 七言 or 柒言 or 桼言, *Lai yen* 來言,

and others, according to different readings of the first character. The *Po ku t'u lu*, XXVIII, 8, figures a mirror with an inscription of this type, and transcribes the first two characters 來言 *lai yen*. Liu T'i-chih includes nine of them in his *Hsiao-chiao-ching-ko chin wên t'a pên*, XV, 64–6, and follows the precedent of the *Po ku t'u lu*. Unfortunately it is difficult to extract an intelligible meaning from this reading. The *Chin shih so*, XI, 385, reads the first characters as 桼言 and regards them as a *hsing-ming*, name and surname, a most unconvincing suggestion. Lo Chen-yü and most other modern Chinese scholars read them as 七言, 'seven words', as do Yetts and Karlgren. In reply to an enquiry the former kindly points out in a letter that either of the alternative forms 來 or 来 can be taken as borrowed for 七, 来 being used to write 桼, one way of writing 漆 which is also written 柒, an alternative for 七, 'seven'. Since 柒 resembles more closely the 'fancy' character on the mirror I have used this form in the transcription.

Karlgren proposed the translation of the first line, as given above, and explained that the 'the rule of the seven words' referred to the seven-worded lines of the stanzas, which are in fact quite regular in mirror inscriptions (cf. that on A.61), though not found in the poetic literature earlier than certain parts of the *Ch'u tz'ŭ*, some of which may date from the fourth century B.C. He concluded that the author of our inscription seems to indicate that this kind of verse first became popular through mirror poems (*Early Chinese Mirror Inscriptions*, pp.69, 70). Yetts refers to a tradition that rhymed verse with seven characters to a line was invented by the Han Emperor Wu about 108 B.C. for poetry contests in which he engaged with his courtiers (*The Cull Chinese Bronzes*, p.117). It may seem strange that Han mirror inscriptions which are usually confined to good wishes and magic formulæ, should open with a remark on prosody. It is, however, difficult to suggest an alternative interpretation, and it is possible that some special power or merit was supposed to inhere in the seven-word construction, especially if it were thought to have been conceived in the mind of the Son of Heaven himself.

The last phrase *i ku shih*, which occurs fairly frequently on Han mirrors, has usually been rendered 'it [the mirror] is suitable for the market', surely a most improbable anti-climax. Yetts and Karlgren have both shown that the character *i* 宜 in mirror inscriptions commonly carries the optative meaning 'may you have' (*Eumorfopoulos Catalogue* II, p.32, and *Early Chinese Mirror Inscriptions*, p.15), and the wish here is certainly for prosperity – that the owner may find good markets for his merchandise. That it should be expressed in this way is a remarkable reflection of the great and well-known access of interest in trade in the middle centuries of the Han Dynasty.

A.63 PLATE XXXIV

MIRROR

Diameter 7⅜ inches (19 cm)

The central boss rests upon a rosette with four pointed petals. This is enclosed by a square containing the 'duodenary signs' separated from each other by twelve nipples.

Outside the square is the main zone with 'animals of the four quarters' and other auspicious creatures in linear relief, eight larger nipples and the TLV forms. This is surrounded by narrow geometrical borders and a raised rim with a pattern of dissolved animal forms.

Han or Hsin period, *c.*100 B.C.–A.D.100.

A.64 PLATE XXXIV

MIRROR

Diameter $6\frac{3}{8}$ inches (16·3 cm)

The boss rests upon an eight petalled rosette, surrounded by nine nipples; between each pair of these is a wisp of the so-called 'cloud pattern', probably derived, in fact, from animal forms. Next comes a ring of concatenated arcs, succeeded by the main field of decoration – a variety of animals in linear relief, separated by TLV forms and by eight more nipples. On the rim is a series of dragons with stylized and elongated bodies. The contours of the decoration are more rounded than is usual.

The colour of the bronze is somewhat leaden, with green incrustation, but much of the reflecting surface is intact.

Han or Hsin period.

A.65 PLATE XXXV

MIRROR

Diameter $5\frac{1}{4}$ inches (13·3 cm)

In the zone around the central boss are arranged a series of five figures separated from each other by nipples. Two have the appearance of *hsien*, fairy immortals: the three others are humans sitting cross-legged. The first has before him a lute, and is evidently Po Ya, a legendary lute player of marvellous skill. The second and third have their arms crossed and their faces hidden in their hands, and are presumably Ch'êng Lien, his teacher, and Chung Tzŭ-ch'i, his favourite listener. The next zone is occupied by an inscription of thirty-six characters, and the third consists of 'comb-tooth pattern'. On the raised rim is a fourth zone filled with a complex of super-natural beings – a 'fairy', composite animals, dragons, birds, and fish.

Green and blue patina.

Later Han period or early Six Dynasties.

Illustrated in Koop, *Early Chinese Bronzes*, pl.76a, and in Umehara, *Shina Kodo Seikwa*, Pt.II, Vol.II, pl.99b, where it is attributed to the third century A.D.

The inscription contains several corrupt characters, but the intention appears to have been that it should read as shown on the following page.

朱　氏　作　珍　奇　鏡　兮
世　間　未　嘗　見
有　伯　牙　鼓　鳴　琴　兮
子　期　傷　面　子
動　弦　合　商　時
泣　下　不　可　止　　　僑　誦

'Master Chu made this precious and wonderful mirror, such as has never been seen in the world before. On it are Po Ya playing his lute and Tzŭ-ch'i with face disfigured. Whenever Po Ya tunes his string to the note *shang*, tears fall and cannot be stopped. Ch'iao Sung.'

Shang is the second note of the scale, corresponding to D or *re*, to which the second string of the lute was tuned. Ch'iao Sung may be a name, but also carries the meaning of 'sojourners' song'. It will be noticed that the last characters of the second and fourth lines, *chien* and *tzŭ* do not rhyme, though *chien* rhymes with *mien*, the character preceding *tzŭ*. The poem is perhaps a garbled version of a popular ditty.

The allusion is to a story recounted in *Lü shih ch'un ch'iu* (attributed to Lü Pu-wei, third century A.D.) and elsewhere. Po Ya was a famous lute player and Chung Tzŭ-ch'i, his friend, the perfect listener. Once, as he played, Po Ya's thought dwelt on Mount T'ai, whereupon Chung Tzŭ-ch'i exclaimed, 'How majestically you play! It is just like Mount T'ai.' Then Po Ya turned his thought to flowing waters, at which his friend said, 'How your music rolls along, just like flowing waters!' When Chung Tzŭ-ch'i died, Po Ya broke his lute, and never played again, believing that there was no listener left in the world from whom such response could be evoked. (*Lü shih ch'un ch'iu*, XIV, *Pên wei*, and the German translation of R. Wilhelm, *Frühling und Herbst des Lü Bu We*, Jena: 1928, p.180). Chung Tzŭ-ch'i is regarded as the ideal of the sympathetic listener and connoisseur of music.

A.66 PLATE XXXV

MIRROR

Diameter $5\frac{1}{4}$ inches (13·3 cm)

Similar in character to A.65 but uninscribed. In the first zone are a *hsien*, a deer, and four birds in linear relief alternating with six nipples. Next to this is a zone containing a series of elongated animal forms in modelled relief, with a fringe of 'comb-tooth pattern'. The decoration of the raised rim resembles that of A.65, but is much worn.

Later Han period or Early Six Dynasties.

A.67 PLATE XXXVI

MIRROR

Diameter 5 inches (12·7 cm)

Around the central boss is a narrow zone containing eight nipples separated by small scroll-shaped devices. This is succeeded by a wider zone containing a dragon, a

crested bird, a tiger, and a deer or *ch'i-lin* in linear relief separated by four larger nipples, the whole enclosed by a border of 'comb-tooth' pattern. On the raised rim are eight compartments containing figures of dragons, much dissolved.

Black patina.

Later Han period.

Certain ancient Chinese bronzes have survived with surfaces showing hardly any signs of corrosion and having a level identical with that of the original bronze. Generally there is some pigmentation of this surface, the effect being that known as 'water patina'. Such freedom from corrosion is especially common in the mirrors. The explanation is to be found, no doubt, in the composition of the alloy, in which the tin content is relatively high and lead is nearly always present. Several investigators in the West and in Japan have made quantitative analyses of the material of mirrors known or believed to be of Han date. W. B. Burwell, in a valuable thesis on 'Bronze Mirrors of the Han Period' presented for the M.A. degree of the University of London in 1952, but not as yet published, collated their reports, which showed a remarkable uniformity in the main constituents. The average content of copper was 69·29 per cent, of tin 25·14 and of lead 3·42. Such mirrors had, and have in many cases retained, a light silvery colour. Others, like A.67 and several more in the collection, are entirely covered with a beautiful jet-black patina quite free from corrosion after burial for so many centuries, except in places where the surface is fractured. This phenomenon has for long perplexed students of the bronzes, who have sought to determine its cause, and whether the effect was due to chance or the intention of the mirror casters.

In 1930 Yetts wrote as follows: 'I have long held the view that the quality of this coating is so perfect and uniform that the generally accepted explanation of a patina due to accidental chances of environment fails to carry conviction. At my request Dr H. J. Plenderleith has been good enough to make a chemical examination, and he finds that the black coating withstands all reagents except a mixture of nitric and hydrofluoric acids. This fact suggests the possibility that the coating may have been intentionally produced by mixing silicious matter with the layer of the mould which comes into direct contact with the molten metal. Thus a coating of a compound something like silicon bronze might be produced. The problem must be investigated further before any definite statement can be made' (*Eumofopoulos Catalogue*, II, p.42).

Plenderleith himself, when writing on the subject some years later, confirmed his discovery of silica in the black shiny patina of speculum metal from Korea in such quantity as to suggest that the effect might have been intentional. He had come to believe, however, that as a rule the effect was merely connected, on the one hand with the presence of much tin in the alloy and, on the other, with the fact that where the metal has been burnished, any overlying black patina has an additional lustre (*Technical Notes on Chinese Bronzes*, in *TOCS*, XVI [1938–9], p.45).

More recently R. J. Gettens came to the conclusion that both the 'water patina' and 'black-lacquer patina' are composed of tin oxide, not the copper salts usually associated with bronze corrosion, though the discoloration may be due to staining by

copper salts. He made photomicrographs of cross-sections of mirrors showing (1) the metal body of the mirror, (2) a thin dark line of corrosion penetration, and (3) a thicker grey layer of tin oxide. Gettens suggested that (2) may be identical with the 'black-lacquer patina', but did not venture to indicate its composition, the problem of which 'could only be solved by extensive metallurgical and chemical research'. (*Tin Oxide Patina of Ancient High-Tin Bronze*, in *Bulletin of the Fogg Museum of Art*, XI [Jan.1949], pp.16–26.)

Dr G. F. Claringbull of the British Museum (Natural History) has kindly examined at my request two mirrors in the collection, A.73 and 77. He succeeded in scraping a thin coating from the underlying bronze of A.77, the surface of which had already suffered some damage. He reports: 'This coating is transparent and practically colourless in the finely powdered form in which it is scraped. An X-ray powder photograph, confirmed by the presence of tin chemically, shows that the coating is cassiterite (SnO_2). This result is obviously in line with Gettens' tin oxide patina of ancient high tin bronze. Whether the coating is original or the result of oxidation of a surface layer of tin, or of tin from the bronze, remains to be decided . . . The oxide coating would not by itself produce blackness, although it has a high reflectivity because of its high refractive index. What I am certain about is that I have removed the surface coating above the alloy, and that this is essentially tin oxide.'

Both Gettens' and Claringbull's investigations thus appear to dispose of the silicon bronze theory in respect of the mirrors examined by them, but the conditions which determined the development of a water patina on the one hand or a black patina on the other have not been recognized. While one would expect that the aim of the mirror casters would have been to produce a silvery surface with high reflectivity, resistent to corrosion and perhaps even to tarnish, it is unlikely that a black finish would have been favoured. It is more probable that these high tin alloys were all light coloured at the time they were cast and polished, but that the composition of some of them encouraged the formation of the black patina in the course of centuries of burial.

While the black patina on ancient Chinese bronze is almost entirely confined to mirrors, the fact that the Luristān pin head A.112 has the same patina, black and free of corrosion, is not without interest.

A.68 PLATE XXXVI

MIRROR

Diameter $5\frac{3}{4}$ inches (14·8 cm)

Around the unusually high central boss six lions disport themselves. A circular ridge separates them from a narrow outer zone containing an inscription of twenty-four characters and enclosed by a high rim with tooth and zig-zag ornament.

Silvery colour. Green incrustation combined with traces of yellow loess.
Period of the Six Dynasties.
Inscription: The following decipherment and translation of the inscription are suggested:

團 團 寶 鏡
　 皎 皎 昇 臺
鸞 窺 自 儛
　 照 日 花 開
臨 池 似 月
　 覩 良 嬌 來

'Perfectly round is [this] precious mirror,
  Glistening white its shining face.
If a phoenix looked at it, he could not but dance.
  When it reflects the sun, the flowers open.
It resembles the moon seen in a pool.
  Gaze, and see your fair beauty appear.'

For the allusion to the dancing phoenix cf. A.72.

A.69 PLATE XXXVII
MIRROR
Diameter 6½ inches (16·7 cm)

Around the unusually large central boss is a symmetrical arrangement of four petals and sixteen arcs, within each of which is an animal or a bird; most of these are galloping or in flight. Between the petals are pairs of confronted birds, each pair being separated by a plant or tree in a manner suggestive of Sassanian influence.
Smooth grey-green patina.
Six Dynasties.
Illustrated in Umehara, *Shina Kodo Seikwa*, Part II, Vol.I, pl.82, where three similar mirrors, two inscribed, are shown (pl.79–81).

A.70 PLATE XXXVII
SQUARE MIRROR
Dimensions 5 × 5 inches (12·7 cm)

The technique of decoration is that known as *p'ing t'o* 平脫. The design is composed of thin, engraved plaques of gold and silver, set in a lacquer bed.
From the central boss proceed in all directions short petal-like rays, presumably a device to represent the sun. Around it are disposed four figures of lions in lively movement, and beyond them four birds, on the wing or just alighting. The corners are filled with symmetrical arrangements of vines, and the whole is framed by the

raised rim of the mirror. The design is a variant of the 'animal and grape-vine', in which Sassanian influence is unusually marked. Cf. A.75.
T'ang period.

A.71 PLATE XXXVIII
MIRROR
Diameter 7½ inches (19 cm)

The boss rests upon a rosette surrounded by a raised circle. Outside this are disposed six sprays of flowers in low relief. The raised rim has six lobes.
Smooth dark green and greyish green patina.
T'ang period.

A.72 PLATE XXXIX
MIRROR
Diameter 6¼ inches (15·8 cm)

The single figure of an alighting, or 'dancing' phœnix is superbly modelled in low relief. The narrow rim is eight-lobed.
There are numerous stories of pheasants or phœnixes which dance when they see their images reflected. Cf. the allusion in the inscription on A.68, and see Yetts, *Eumorfopoulos Catalogue*, II, p.57.
T'ang period.
In the International Exhibition of Chinese Art, London, 1935–6 (Catalogue No.653).

A.73 PLATE XL
MIRROR
Diameter 3⅝ inches (9·2 cm)

The central loop is surrounded by a narrow zone composed of an arrangement of rhomboid and spiral forms. This is enclosed by plain circular borders separating it from the main field of decoration, a complex design of the stylized and interlocked bodies of birds and dragons on a background of rhomboids. The mirror has a high rim (4 mm).
Black patina.
Early Han period.
Mirrors of similar design have been found in the Shou Hsien (An-hui) district. Many are illustrated and discussed in Karlgren, *Huai and Han*, pp.16 ff. and 103, where cogent reasons are adduced for attributing them to the second century B.C. They are placed by Karlgren in Category F, and this mirror is illustrated by him as F.39 on pl.62.

A.74 PLATE XL
MIRROR
Diameter 4⅜ inches (11 cm)

The boss rests upon a rosette of four petals, between each pair of which is a character. Surrounding the rosette is a ring of concatenated arcs. The inscription reads, *Ch'ang i kuan wei* 長宜官位, 'May you long hold an official appointment!'
Black patina.
Han period.

A.75 PLATE XL
MIRROR
Diameter 4⅝ inches (11·8 cm)

The central loop for the attachment of the cord has the form of a lion with arched back. The zone immediately surrounding the loop contains the writhing figures of four more lions separated by four birds, two perching and two in flight, among festoons of grapes and vine-leaves. Beyond this is another zone occupied by grapes, birds and butterflies. The whole is in well-modelled relief.
The bronze is of silvery colour, probably due to a high content of tin and lead.
T'ang period.
This is the best-known of all T'ang mirror designs. The compilers of the twelfth-century imperial catalogue, *Po ku t'u lu*, called it *hai-ma p'u-t'ao*, literally 'sea-horses and grapes', and it has been known by this name ever since, though sometimes the word *shou*, 'animals', has been substituted for *ma*, 'horses'. Whilst the animals represented in combination with grapes on mirrors of this class are generally lions, on a few they are unmistakably horses (as are those on the first two figured in the *Po ku t'u lu*) and more rarely foxes or other creatures. The origin and significance of the design and the reason for its curious designation have been subjects of debate by Western scholars for more than half a century. Their opinions and arguments were summarized and assessed by Yetts in *The Cull Chinese Bronzes*, pp.167–73, and some interesting views have been expressed more recently by Schuyler Cammann in an article entitled *The Lion and Grape Patterns on Chinese Bronze Mirrors*, in *Artibus Asiæ*, XVI (1953), 265–91. The design is generally known in Europe and America as 'beasts and grapes'.
The authors of the Sung Dynasty catalogue attributed such mirrors to the Han Dynasty. Whilst they did not give their reasons it would seem that the belief arose from the fact that the grape vine was reputed to have been introduced in the Former Han by the famous explorer Chang Ch'ien. Doubts had been expressed by several writers, Chinese and Western, as to the validity of this attribution, but Japanese archaeologists were the first to show that the earliest 'beasts and grapes' mirrors appeared towards the end of the Six Dynasties and that the most and the best of them are products of the T'ang. This view is no longer disputed. Scrolling grape-vine

designs, with or without lions or other animals, certainly originated in the Middle East, probably in Mesopotamia or Persia, and have no antecedents in China before the sixth century.
The question remains as to why the beasts were called *hai-ma*, 'sea horses'. Yetts concluded that the word 'sea' was used in the sense of 'beyond the seas' (*hai wai*), 'foreign', implying the traditional fiction that China, mainland of the world, is surrounded by the Four Seas. Cammann believes that the name derives from the comparatively rare T'ang mirrors on which the animals are clearly winged horses; that these represent the *t'ien ma*, the 'heavenly horse', of old Chinese folklore; that by Sung times this creature had passed out of Chinese tradition, and that its place had been taken by the *hai ma*, or 'sea horse', a new tradition; and that thinking in terms of his own time the compiler of the imperial catalogue decided that the horses on the two fine grape mirrors were sea horses, and accordingly he called them 'Han sea-horse and grape mirrors'. This argument would be persuasive if the rest of the 'Han sea-horse and grape mirrors' in the *Po ku t'u lu* had horses in their designs. In fact they have none, most of the animals being of the same species as those on the Seligman mirror. Yet the compiler called them all 'sea-horses and grape mirrors'. It was this apparent anomaly that led later cataloguers, such as those of the Ch'ing imperial collections, to amend the name 'sea horse' to the less precise 'sea animal'.
I have ventured to propose a much simpler and, I believe, more acceptable explanation. By far the most numerous variety of the 'beast and grapes' mirror is that on which the beasts are those we see on the specimen before us, and which we might expect would have suggested a name for the whole group. These beasts are undoubtedly lions, the actual appearance of which in life would have been unknown to most Chinese of the Sung period. Most of the animals on the mirrors, however, are depicted in a writhing posture, in which one of the hind legs is concealed by the other, so that the body appears to taper like that of a seal or walrus. This fancied resemblance, I suggest, provided a convenient 'collectors' name' current in Sung times, which was adopted and regrettably perpetuated by the imperial cataloguers. *Hai-ma* is the current Chinese name for the walrus, an appropriate one for this or for other large amphibians, familiar denizens of the Pacific coast of Asia. Though I do not know of occurrences of the term with this connotation in Sung literature, I have no reason to doubt its antiquity, or that large amphibians were known to the Chinese in the twelfth century.
The practice of naming a decorative design or motive according to some superficial resemblance, when its true nature is not recognized, is unfortunately common in China, as it is in the West. Other examples are the Chinese name 'drifting clouds' for the ornament on the thickened rim of A.61, and the English name TLV for the main design of that mirror.

A.76 NOT ILLUSTRATED
MIRROR
Diameter $4\frac{1}{8}$ inches (10·4 cm)

The decoration of lions among grape vines is similar to that of A.75.
The silvery colour may be due to a high tin and lead content.
T'ang period.

A.77 NOT ILLUSTRATED
MIRROR
Diameter $3\frac{7}{8}$ inches (10 cm)

The decoration of lions among grape vines is similar to that of A.75.
Black patina with patches of corrosion and green incrustation.
T'ang period.

A.78 PLATE XL
MIRROR
Diameter $3\frac{7}{8}$ inches (9·8 cm)

The octafoil shape is that called by the Chinese *ling-hua shih*, the shape of the water-chestnut flower. The central loop is formed of the body of a lion, around which are disposed four more lions. The outer zone contains a symmetrical arrangement of eight figures, perhaps representing birds or insects in flight, as in the outer zone of A.75.

Style of the T'ang period, but probably later.

The face of the mirror is incised with an Arabic inscription, the Nashkī script of which indicates a date not earlier than the thirteenth century. I am indebted to Dr D. S. Rice for the following translations. At the centre, 'In the name of Allah, the merciful, the compassionate'. Around this is a circle of magic figures. At the rim: 'O 'Ali, O 'Ali, O 'Ali! O Allah! O Muhammad! O 'Ali, O 'Ali, [one word] he who purifies. You will find him full of help in all troubles. All grief will flee away.' At the points of the petals, 'Allah, Muhammad, 'Ali' each repeated thrice. The invocation is typical of the Shiah sect, which regards 'Ali, the son-in-law of Muhammad, as the latter's lawful successor, and rejects the first three of the Sunni caliphs as usurpers. The inscription was probably cut in Persia.

A.79 PLATE XL
MIRROR
Diameter $3\frac{7}{8}$ inches (9·8 cm)

Octafoil shape. The decoration is a symmetrical arrangement of ducks, flowers, and foliage in two concentric zones.

Probably Japanese (Fujiwara period, A.D.897–1185) or contemporary Korean.
For similar mirrors see Yamakawa, *Daikei Nihon kokyo zushu*, pl.4–6.

A.80 PLATE XL
MIRROR
Diameter $4\frac{1}{2}$ inches (11·4 cm)

Octafoil shape. The decoration is a symmetrical arrangement of birds, flowers, and foliage.

Smooth green patina.
Probably Japanese (Fujiwara period, A.D.897–1185) or contemporary Korean.
For similar mirrors see Yamakawa, *Daikei Nihon kokyo zushu*, pls.4–6.

A.81 NOT ILLUSTRATED
MIRROR
Diameter $5\frac{3}{8}$ inches (13·6 cm)

The shape and decoration are similar to those of A.80.
Probably Japanese (Fujiwara period, A.D.897–1185) or contemporary Korean.

A.82 PLATE XLI
MIRROR
Diameter $7\frac{3}{4}$ inches (19·8 cm)

Relief decoration of figures in a landscape. On the left is a pavilion or temple on an island or perhaps on a cloud: on the right is a large tree. A bridge spans the water in the foreground, and below it a dragon rises from the waves. On the left is a figure attended by two umbrella bearers. Approaching them over the bridge is a scholarly figure preceded by another umbrella bearer. Between the two groups squat two smaller figures. The great tree at the right overhangs the whole scene.

Smooth grey-green patina.

Korean. Koryŏ period (A.D.936–1392).

A similar mirror is illustrated in Yetts, *Eumorfopoulos Catalogue* II, pl.XXXVII, B.69, on which more details can be discerned. A female figure stands before the half-opened door of the pavilion, whilst the two small figures in the foreground are seen to be the hare, with pestle and mortar, and the toad, both symbols of the moon. Yetts draws attention (p.64) to several Japanese writings in which mirrors with this design, or variant versions of it, are illustrated, but the subject is not identified.

It appears to be the story of Ch'ang O, or Hêng O, and her flight to the moon, a popular astronomical myth. The seated figure with attendants probably represents Tung Wang Kung, the Sovereign Lord of the East, and the lady before the pavilion his consort, Hsi Wang Mu, the Queen Mother of the West, or perhaps Ch'ang O, the heroine of the story herself. The gentleman crossing the bridge would be Ch'ang O's husband, Hou I, or Shên I, the Divine Archer, and the dragon the celestial mount from whose back he has alighted. The tree is the mighty cassia tree fabled to grow in the moon.

There are several variants of the Ch'ang O myth, of which a circumstantial account is given in Hsü Tao, *Shên hsien t'ung chien* (Mirror of Mythology), edition of 1787, V.12–21.

Hou I was a hero of the Age of the Five Rulers, who slew with his magic arrows the numerous monsters that terrorized the land. He was also a prodigious traveller, sometimes riding through space upon a comet or a shooting star, regarded by the Chinese as a 'celestial dragon'. He visited the goddess Hsi Wang Mu in her mountain fastness, built her a 'jade palace', and was rewarded with a 'pill of immortality', which he took home and hid on a beam beneath the roof. His wife, Ch'ang O, attracted to the place by a luminous glow which the pill emitted, climbed up to the beam, where she discovered and ate the pill. Finding herself no longer subject to the law of gravity, but fearing the anger of her returning husband, she fled to the moon. On her arrival there she began to cough, and vomited the covering of the pill of immortality, which instantly changed into a hare as white as the purest jade. This is the creature represented in pictures of the moon as engaged in pounding the elixir of immortality with pestle and mortar.

Meanwhile, Hou I, pursuing his erring spouse through space, was carried by a hurricane up into a high mountain, where he found himself at the palace of Tung Wang Kung, the consort of Hsi Wang Mu. The god informed him that Ch'ang O was now an immortal in the Palace of the Moon, but that Hou I would be rewarded for his services to gods and men by the grant of similar accommodation in the Palace of the Sun. He would be allowed, moreover, to visit his wife if he wished, though it would not be possible for her to return his visits.

The appearance of comets and shooting stars is accounted for by Hou I's journeys.

A.83 PLATE XLII
STANDING FIGURE OF A HORSE
Length $3\frac{1}{2}$ inches (8·8 cm)

Gilt bronze. The animal is saddled and accoutred in the manner of the well-known pottery tomb figures. Such figures in cast metal are rare.

T'ang period.

This model may be compared with the figures of horses in the inscription on A.2, the bronze cauldron dating from nearly two thousand years earlier. The wild horse of the Steppes, depicted in the inscription, has now been succeeded by a larger animal with proportionally smaller head and shorter back, deep jaw, and powerful chest and haunches. These are the characteristics of the superior horse imported from Central Asia to China from the second century B.C. onward. The Chinese had certainly domesticated the horse as early as the Shang-Yin period, when they drove it in harness, but they do not appear to have taken to riding before the fourth century B.C., when some of the northern states of the Chou confederacy were using mounted troops in their wars with the nomads.

In the former Han Dynasty legends were current in China of a marvellous breed of

'celestial horses' credited with supernatural powers and raised in the distant kingdom of Ferghāna, famous throughout the ancient Middle East for its horses. With a view to obtaining by purchase some of these animals for his own use and also no doubt to improving the quality of his cavalry by acquiring a breeding stock of superior horses, the Emperor Wu (140–87 B.C.) sent a peaceful embassy to Ferghāna. The embassy was a failure and the ambassadors were murdered on their return journey. Two costly punitive campaigns followed, leading eventually to the defeat and death of the king of Ferghāna, the firm establishment of Chinese prestige in Central Asia, and the opening to Chinese trade of the highway to the West. The importation of horses from Ferghāna, thus begun, continued during the centuries following the Han. Cross-breeding with the native horse led to the emergence of the lively and sturdy type known as the 'China pony', but the pure-bred imported animal, as here represented, was the ideal of the modellers and sculptors of the T'ang period, and was presumably not uncommon in China at that time. A fascinating and well-documented account of the Chinese quest for the superior horse and its cultural consequences is given in Yetts, *The Horse: A Factor in Early Chinese History*, in *Eurasia Septentrionalis Antiqua*, IX (1934), pp.231–55.

A.84 PLATE XLII
STANDING FIGURE OF A BODHISATTVA,
PROBABLY AVALOKITEŚVARA (KUAN-YIN)
Height $5\frac{7}{8}$ inches (15 cm)

The right hand may have held a flask, now lost.

The raised left hand is broken. Streamers hang from each side of the head-dress, and fall over the arms and body. The sole garment is the skirt which clings closely to the limbs. A process behind the shoulders may have supported a halo.

Green patina.
T'ang period.

A.85 PLATE XLII
HORNED TORTOISE WITH REMAINS OF SNAKE ON BACK
Length 7 inches (17·7 cm)

Period doubtful.

The use of the tortoise and snake as a decorative or symbolic device and the association of the two in Chinese thought are very ancient (cf. A.11, 21, 58, and 61). In later times the large aquatic tortoise, or terrapin, found in fresh waters of South China, came to be regarded as a deity of lakes and rivers, and was endowed with some of the powers attributed to the dragon, such as that of changing its shape and size at will. The tortoise, as depicted here with its horn or crest, may be intended to represent this deity.

A.86 PLATE XLIII
BIRD-CHARIOT VESSEL
Length $5\frac{1}{2}$ inches (14 cm)

The sitting figure of the bird is supported on two wheels. The hollow body forms a vessel from which fluid could be poured through the bird's beak by tilting the body forward on the wheels. The flange on the breast would act as a check to prevent the contents being spilt. The cover for the circular opening on the back is missing. The body is decorated with stylized birds and squared spirals. The vessel may have been used to serve heated spirits at banquets.

Probably eighteenth century.

Illustrated and discussed in C. G. Seligman, *Further Notes on Bird-Chariots in Europe and China*, in *Journal of the Royal Anthropological Institute*, LVIII (1928), pp.247–55. See also B. Laufer, *The Bird-Chariot in Europe and China*, in *Boas Anniversary Volume*, New York: 1906, pp.410–24.

Similar objects were figured in the imperial catalogue, *Hsi ch'ing ku chien*, XI, 29, commissioned in 1749, and in S. W. Bushell, *Chinese Art*, I, Fig.56, though in these examples the vessel has a flaring mouth like that of a *tsun* or a *ku* (cf. A.6) rising from the back of the bird. The *Hsi ch'ing ku chien* stated that the object was a plaything, not a ritual vessel, but Bushell (ibid., p.91) thought it *was* a ritual vessel, and that the wheels 'adapted it to circulate on the altar during the performance of the ancestral ritual ceremonies'. None of these vessels have the characteristics of early bronzes, though the *Hsi ch'ing ku chien* and Bushell attributed their specimens to the Han Dynasty. The form, however, undoubtedly derives from that of the *chiu-ch'ê* 鳩車, 'dove chariots' (cf. A.97), two specimens of which are figured in the Sung Dynasty catalogue, *Po ku t'u lu*, and are there described as children's toys and attributed to the Han and Six Dynasties periods respectively. The flanges on the head and breast, and along the tail, display vestiges of the chicks found on the earlier dove-chariots. The bird-chariot vessel, however, is constructed to contain and pour liquid, and has no perforation at the breast for towing. As a 'plaything' it would seem, therefore, to have been designed to appeal to those of riper years.

A.87 PLATE XLIII
STAND OR VESSEL, *TSUN*, IN THE FORM OF AN IBEX
Length $5\frac{1}{2}$ inches (14 cm)

The decoration, inlaid in gold and silver, consists of geometrical and scroll patterns.

Smooth dark green patina.

Style of the Late Chou period, but later.

A.88 PLATE XLIII
STANDING HUMAN FIGURE WITH THE HEAD OF AN OX
Height $7\frac{1}{4}$ inches (18·5 cm)

The figure, representing the second of the twelve zodiacal animals, wears a long flowing robe, spreading outward at the feet.

Smooth patina with bright green and red patches.

Period doubtful.

The concept of the Twelve Animals, corresponding to the Twelve *Ch'ên* or duodenary signs (see p.74), appears to have emerged during the Former Han Dynasty, and to have been conspicuous in Chinese thought ever since. The animals are the rat, ox, tiger, hare, dragon, serpent, horse, sheep, monkey, cock, dog and pig. They preside successively over the twelve double-hours from midnight to midnight, the twelve months, and the twelve years corresponding to the Twelve Branches. The year of each animal thus recurs five times in each sixty-year cycle. A Chinese born under the ox would have regarded his life as passing under the auspices of that animal, and would have kept and valued this figure as an amulet.

The figure may have been made at the same time and place as two similar figures, one with a ram's head and the other with that of a hare, illustrated in Umehara, *Shina Kodo Seikwa*, Part III, Vol.I, pl.17, and there attributed to the Six Dynasties.

A.89 PLATE XLIII
VESSEL, PERHAPS A PERFUME-BURNER, IN THE FORM OF A FABULOUS ANIMAL
Length $4\frac{3}{8}$ inches (11 cm)

The animal has the general character of a feline; the horn-like projections from the head and chin are perhaps the conventionalized mane and beard of the lion. On the hind quarters are raised spirals, perhaps representing the animal's tail, and on the shoulders vestiges of wings.

The form is similar to that of the great winged felines in sculptured stone, erected at tombs of the Six Dynasties as *pi-hsieh*, 'guardians against evil influences'.

Smooth green patina.

Probably period of the Six Dynasties.

A.90 PLATE XLIII
CUP IN THE FORM OF AN OX'S HEAD, PARTLY GILT
Length 4 inches (10·2 cm)

Probably Ming period.

This distinctive type of drinking cup known as the *rhyton*, and made of metal or pottery, is believed to have originated in the Eastern Mediterranean or Western Asia, but is well known in China. A bronze specimen, without gilding, is figured in the *Po ku t'u lu*, XVI, 18, and attributed to the Han period.

See Seligman, *A Note on Rhytons*, in *Custom is King* (Essays presented to R. R. Marett), London: 1936, pp.113–15.

A.91 PLATE XLIV
STANDING FIGURE OF A BUDDHA.
Height $8\frac{7}{8}$ inches (22·5 cm)

The Buddha stands on a lotus pedestal with right hand in *vara mudrā*, the gesture of 'bestowing'. The left hand is missing. He wears a long under-garment and an over-garment with long sleeves. On his breast is a swastika in relief. There are remains of gilding.

The figure was described by W. Cohn in *A Chinese Buddha Image of the Year 1396*, in *The Burlington Magazine*, Vol.77 (July 1940), p.14.

In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.268).

Inscription of twenty-two characters cast with the figure on the back of its skirt:

洪 武 丙 子 四 月 吉 日
周 府 造 一 樣 四 十 八 尊 以 報 四 思 者

'On a fortunate day of the fourth month of the year *ping-tzŭ* of the Hung-wu period (A.D.1396) Chou Fu made forty-eight identical sacred images to repay the four debts of gratitude (i.e. to parents, teachers, elders, and monks).'

A.92 PLATE XLV
BELL-SHAPED ORNAMENT OF ELLIPTICAL SECTION
Height $3\frac{3}{8}$ inches (8·6 cm)

The design is in open-work with gold and silver inlay. It consists of elements of animal forms interspersed with spirals in a manner reminiscent of the style of the Third Phase. Below these is a horizontal row of stylized cicadas, and another of symmetrical scrolls. Suspension is by a lively little crouching feline modelled in the round.

Perhaps Ming period.

A.93 PLATE XLV
WINE JAR, *HU*
Height $5\frac{3}{8}$ inches (13·8 cm)

The main zone of the decoration, inlaid in gold and silver, is occupied by stylized dragon and bird forms; above and below are borders of rhomboid forms and rising and falling blades; at the foot, a border of twisted cord. On the shoulder are two masks in low relief with loose ring-handles.

Sung period or later.

A.94 PLATE XLVI
STAND OR VESSEL, *TSUN*, IN THE FORM OF A *CH'I-LIN*
Length $4\frac{1}{4}$ inches (10·8 cm)

The recumbent animal has a single horn, cloven hoofs and the tail of a lion. The body is decorated with spirals and geometrical patterns.

Green patina with some incrustation.

Style of the Late Chou period, but later.

The *ch'i-lin*, like the *lung* (dragon) and *fêng-huang* (phoenix), is a fabulous animal of good omen. It is variously represented, but commonly as here, with the body of a deer and a single horn. Sometimes it has a dragon's head with a mane and two horns and a body covered with scales instead of hair.

A.95 PLATE XLVI
RECUMBENT FIGURE OF BOVINE
Length $2\frac{5}{8}$ inches (6·6 cm)

Period doubtful.

A.96 PLATE XLVI
PLAQUE IN THE FORM OF A DOVE
Width $2\frac{1}{8}$ inches (5·5 cm)

The wings are extended, and the front of the plaque is divided into a number of deep compartments.

Numerous bronze plaques of this kind have come to light in recent years, mostly in Sui-yüan Province and especially the Ordos region. All, or nearly all, are in the form of birds, apparently doves, or of crosses. The latter have four wedge-shaped arms of equal length proceeding from the sides of a small square and widening towards their extremities in the manner of the crosses on Nestorian monuments in China. There has been much speculation both as to the symbolism and the use of these objects. Were they devised as seals or as clothing ornaments? If the latter, were the hollows once filled with inlay? Have the crosses, and perhaps the birds, a Christian symbolism? The possibilities were discussed in A. C. Moule, *Nestorians in China* (China Society Sinological Series, No.1, 1940), and in supplementary remarks by Yetts. The attribution of a Christian significance to the crosses, and to the doves as symbols of the Holy Spirit, is supported by the fact that the region of the most numerous finds was the territory of the Öngüt Mongols in the thirteenth and fourteenth centuries. Many of these people were Nestorian Christians. The theory that the objects were amulets with Christian symbolism, and dated from that period, was accepted by Paul Pelliot, who discussed and illustrated a series of ninety in his article, *Sceaux-amulettes de bronze avec croix et colombes provenant de la boucle du Fleuve Jaune*, in *Revue des Arts Asiatiques*, VII (1931–2), pp.1–3. Yetts, on the other hand, pointed out that the

Nestorian origin had not been proved, and suggested that the cross-form might be traced back to the cosmic mirrors (cf. A.61 ff.) or to the magical figures known as *maṇḍala*, introduced to China from India in the eighth century with the Mantra-yāna form of Buddhism.

A.96a NOT ILLUSTRATED
PLAQUE IN THE FORM OF A DOVE
Width 1 inch (2·5 cm)

A similar specimen to the above, but representing the bird in profile.

A.97 PLATE XLVI
PART OF A DOVE-CHARIOT, *CHIU-CH'Ê*
Length $4\frac{5}{8}$ inches (11·7 cm)

The hollow body of the bird is pierced horizontally to receive an axle which would have carried two wheels, as in A.86. The tail is supported by another, smaller, wheel. Three chicks rest on the bird's back, head and breast. The last has a perforation through which a cord could be passed to pull the bird along.

Probably Six Dynasties or T'ang period.

The twelfth-century catalogue, *Po ku t'u lu*, XXVII, 44, figures two such objects, attributed respectively to the Han and Six Dynasties periods, and explains that they are children's toys. From this it is evident that such things existed in the Sung Dynasty, and were then regarded as antiques. A similar dove-chariot is figured in the Ch'ien-lung imperial catalogue, *Hsi ch'ing ku chien*, XXXVIII, 27, and there attributed to the T'ang period.

These objects, and their later derivatives such as A.86, were discussed by Laufer in *The Bird-Chariot in Europe and China* (*Boas Anniversary Volume*, New York: 1906, pp.410–24) and by Seligman in *Further Notes on Bird-Chariots in Europe and China* (*Journal of the Royal Anthropological Institute*, LVIII [1928], pp.247–55).

Whilst figures of birds mounted on wheels may have existed in China as early as the Six Dynasties or even as the Han, there is no trace of them, literary or archæological, in more ancient times. Laufer pointed out, however, that such objects are well attested over a wide area of Europe and Western Asia much earlier – from the end of the European Bronze Age onward – and referred his readers to seven writings in which they were described and figured. They have usually been regarded as votive chariots and assigned to some religious cult. Whether this surmise was correct or not, it seems that they had no religious significance in China. Seligman also drew attention to bird-chariots of bone and wood still in use among the Ainu and the palaeasiatic tribes of Siberia. It seems probable that the bird-chariot was one of the cultural elements transmitted from Europe to the Far East by the agency of the nomads.

A.97a NOT ILLUSTRATED
PART OF A DOVE-CHARIOT, *CHIU-CH'Ê*
Length 2 inches (5 cm)

The solid body has a loop at the breast and a projection on the right side which may have been a trunnion to hold a wheel.

Period doubtful, perhaps Six Dynasties or T'ang.

A.98 PLATE XLVI
LAMP
Height $4\frac{7}{8}$ inches (12·4 cm)

The receptacle for the oil is a small pear-shaped cup supported on two legs, one terminating in a bird's claw and the other in a flower.

Probably T'ang period.

Illustrated in Umehara, *Shina Kodo Seikwa*, Part III, Vol.II, pl.137, where it is attributed to the period of the Six Dynasties.

A similar specimen is figured by a woodcut in the Sung Dynasty catalogue, *K'ao ku t'u*, IX, 13.

A.99 NOT ILLUSTRATED
CICADA
Length $2\frac{1}{4}$ inches (5·7 cm)

The body is hollow and traversed by a pin holding the two movable wings.

Period doubtful, perhaps T'ang.

Bronzes from the Ordos, Central Asia and Luristān

A.100 PLATE XLVII
COUCHANT DEER
Length $4\frac{3}{4}$ inches (12·1 cm)

The animal lies with its legs tucked beneath the body, but with the head raised and ears erect in an alert attitude.

A.101 PLATE XLVII
OPENWORK PLAQUE
Height $2\frac{1}{8}$ inches (5·4 cm)

The design is of two attenuated felines symmetrically confronted, and between them a fawn which they are about to devour.

A.102 PLATE XLVIII
PLAQUE IN THE FORM OF A FELINE ATTACKING IBEX AND YOUNG
Length $3\frac{1}{4}$ inches (8·2 cm)

The victims are represented by their heads.

A.103 PLATE XLVIII
COILED FIGURE OF A FELINE WITH A LONG TAIL
Width $2\frac{1}{8}$ inches (5·5 cm)

The animal is modelled in the round and designed not for attachment, but perhaps to be carried as an amulet.

A.104 PLATE XLVIII
BELT OR CLOTHING HOOK
Length $2\frac{1}{2}$ inches (6 cm)

The hook is in the form of a gryphon-like animal with open beak; upon its back a smaller pig-like quadruped and a serpent. The bodies of all three animals are covered with oval and semi-lunar protuberances, representing scales or hair. At the back is a stud for attachment.

A.105 PLATE XLVIII
PLAQUE WITH THE FIGURE OF A RECUMBENT ANIMAL IN LOW RELIEF
Length 2 inches (4·9 cm)

A.106 PLATE XLVIII
PLAQUE IN THE FORM OF A TIGER DEVOURING CERVINES
Length $2\frac{3}{4}$ inches (7 cm)

The bodies of the victims are represented by their heads. The tiger's tail terminates in the head of another tiger.

A.107 PLATE XLIX
OPENWORK PLAQUE WITH FIGURES OF FOUR IBEX
Height 2 inches (5·1 cm)

The animals are arranged in a vertical column within a rectangular frame. The lowest is in a recumbent position, the others are in movement.

A.108 PLATE XLIX
PENDANT IN THE FORM OF A TIGER DEVOURING A FAWN
Length $1\frac{1}{4}$ inches (3·2 cm)

The victim is represented by its head.

A.109 PLATE XLIX
PLAQUE IN THE FORM OF A KNEELING CERVINE (ELK OR REINDEER)
Length $1\frac{1}{4}$ inches (3 cm)

A.110 PLATE XLIX
PLAQUE OR PENDANT COMPOSED OF THREE RINGS SURMOUNTED BY A PAIR OF CERVINES
Width $1\frac{3}{4}$ inches (4·4 cm)

The animals are highly stylized, the heads, shoulders, haunches and feet being represented by circular holes appropriately placed.

A.111 PLATE XLIX
PORTION OF A HOLLOW TUBE
Length $3\frac{3}{8}$ inches (8·5 cm)

The tube is rectangular in section. Each of the larger surfaces shows a procession of four animals, probably hounds, in flat relief. On the shoulder and rump of each is a small circle with a dot in the centre. The smaller surfaces of the tube are plain.

A.112 PLATE XLIX
AWL-HANDLE IN THE FORM OF A WINGED GRYPHON
Length $2\frac{1}{4}$ inches (5·7 cm)

The animal, in a couchant posture, has the head of a bird and a body resembling that of a horse. The remains of an iron awl are imbedded in the hind quarters.

The smooth black surface, remarkably free from corrosion, recalls that of certain Chinese bronze mirrors, e.g. A.67.

Luristān, Third Phase.

A similar handle with awl attached is illustrated in Pope, *A Survey of Persian Art*, IV, pl.47B. The object is there described as a pin head, but would seem to be too heavy for personal adornment.

A winged quadruped with a horse's body and a bird's head is to be seen on a Han Dynasty tomb sculpture in Chavannes, *Mission Archéologique*, I, pl.LXX, No.134. A woollen tapestry of mainly Hellenistic design, but incorporating the horse-bird motive, was among the textiles found at Lou-lan, in the Tarīm Basin (Stein, *Innermost Asia*, I, p.242 and pl.XXXII). The presence of the same motive on the Han tomb sculpture led Sir Aurel Stein to conclude that the horse-bird concept was of Chinese origin, but its appearance among the Luristān material makes this doubtful.

A number of similar pieces are known, the composition of the fantastic animal varying considerably. For a discussion of them see S. Przeworski, *Luristān Bronzes in the Collection of Mr. Frank Savery*, p.264 and pl. LXXIX. In a specimen illustrated this author does not see a winged animal, but regards the excrescences on the body as harness.

A.113 PLATE XLIX
FINIAL IN THE FORM OF AN EAGLE'S(?) HEAD
Length 2 inches (5·1 cm)

The head, perhaps a pole-top, is vigorously modelled with open beak and with ears in the form of spirals.

The type is associated with the Minussinsk region of Siberia.

A.114 PLATE L
MASK OF A STAG
Height 3 inches (7·6 cm)

The head and antlers are fully modelled. The reverse side is concave, and there are perforations for attachment.

A.115 PLATE L
PLAQUE IN THE FORM OF A PAIR OF CERVINES MATING
Width $1\frac{1}{4}$ inches (3·2 cm)

At the back is a loop for attachment.

A.116 PLATE L
BOVINE MASK
Height $1\frac{1}{4}$ inches (3·2 cm)

The long horns curve inwards and almost meet at the extremities. The eyes are pierced for the purpose of attachment.

A.117 PLATE L
PLAQUE IN THE FORM OF A PAIR OF CERVINES MATING
Length $1\frac{1}{2}$ inches (3·8 cm)

At the back is a loop for attachment.

A.118 PLATE L
OPENWORK FRAGMENT, DEPICTING A MAN ATTACKED BY A LION
Length $1\frac{3}{4}$ inches (4·5 cm)

A.119 PLATE L
PLAQUE IN THE FORM OF A COUCHED IBEX
Length $1\frac{3}{4}$ inches (4·4 cm)

The reverse is concave with remains of projections for attachment.

A.119a NOT ILLUSTRATED
PLAQUE IN THE FORM OF A COUCHED IBEX
Length 2 inches (5·1 cm)

Similar to A.119, but facing to the right.

A.120 NOT ILLUSTRATED
PENDANT IN THE FORM OF A GOAT OR IBEX
Height $1\frac{1}{2}$ inches (4 cm)

The animal stands in an alert attitude on a small perforated base, representing a rocky pinnacle. There are small circles on the body, as in A.111.

The piece was bought in Cairo, and may have come from Western Asia, but the style is that of the animal art of the Northern Steppe.

A.120a NOT ILLUSTRATED
RECTANGULAR PLAQUE
Height $1\frac{3}{4}$ inches (4·4 cm)

The design in relief is of a standing cervine with the head turned over the shoulder. There are four perforations at the corners for attachment.

A.121 PLATE LI
CHEEK PLAQUE OF A BIT IN THE FORM OF A HORSE WITH COLLAR
Length $5\frac{3}{8}$ inches (13·6 cm)

This horse is particularly well modelled with long head and erect mane. Small stars with curved rays, engraved on the shoulder and haunch, take the place of spirals on animals from the Ordos (cf. A.106).

The complete bit consisted of two cheek plaques and a straight bar connecting them. In section the latter was either square with blunted angles or round. The bit was attached to the bridle by the rings on the cheek plaques.

Luristān, Third Phase.

A.122 NOT ILLUSTRATED
CHEEK PLAQUE OF A BIT IN THE FORM OF A HORSE WITH COLLAR
Length $4\frac{1}{2}$ inches (11·5 cm)

Similar to A.121, but less finely modelled.

Luristān, Third Phase.

Illustrated in Pope, *A Survey of Persian Art*, IV, pl.36c.

A.123 PLATE LI
CHEEK PLAQUE OF A BIT IN THE FORM OF A HORNED SHEEP
Length 4 inches (10·2 cm)

The body is in profile relief, whilst the head is modelled in the round. A double rosette is engraved on the shoulder and on the haunch. An exceptional piece.

Luristān, Third Phase.

Illustrated in *A Survey of Persian Art*, IV, pl.38, B and C: see also text, I, p.260.

A.124 PLATE LI
LINKED BIT WITH CHEEK PIECES
Length of cheek-piece, $6\frac{7}{8}$ inches (17·5 cm)

The straight, linked mouth-bar terminates at each end in a hand which grips the rein-ring. The cheek-pieces are of plain rounded section, each being furnished with two rings for attachment to the bridle.

Luristān, Third Phase.

Przeworski draws attention in *Luristān Bronzes in the Savery Collection*, p.250, to published specimens from elsewhere of mouth-bars ending in human fists, one from Egypt (Eighteenth Dynasty) and another from the hoard of Kvemon Sasirethi in Georgia (twelfth century B.C.)

A.125 NOT ILLUSTRATED
LINKED BIT
Length $8\frac{3}{8}$ inches (21·3 cm)

The linked mouth-bar is grooved spirally, and terminates in two oval rings.

The type has a wide distribution over North China and Central Asia.

A.126 PLATE LII
RECTANGULAR PLAQUE
Height $3\frac{1}{4}$ inches (8·3 cm); width $2\frac{5}{8}$ inches (6·7 cm)

Plaques of this kind mounted on a rod or pin are believed to be staff finials.

The centre is occupied by a horned human figure holding by their hind feet two lions suspended to right and left. The whole is framed by a herring-bone border, and probably represents the Babylonian hero Gilgamesh conquering the lions.

Luristān, Third Phase.

Numerous Luristān plaques depicting this subject are known, and if the identification is correct, it would appear to have been adopted by the Kassites from the Babylonians. The legendary achievements of such a hero would be attractive to horse and cattle breeders, and the plaques may have been endowed with an amuletic value for the protection of their herds from beasts of prey.

A.127 PLATE LII

PLAQUE WITH PIERCED DESIGN OF A DEER ATTACKED BY HOUNDS

Width 4⅛ inches (10·5 cm)

The design, which is nearly square, is surrounded by a border of twisted cords with a conical projection at each corner. It is much conventionalized, and tends to run into spirals and segments of circles, but succeeds in conveying an impression of animation.
Luristān, Third phase.

A.128 PLATE LIII

HARNESS RING

Width 3½ inches (9 cm)

The ring is surmounted by the head of a horned sheep and grasped at right and left by a pair of confronted lions, whose noses touch the points of the horns.
Luristān, Third Phase.

A.129 PLATE LIII

PEAR-SHAPED OBJECT, PERHAPS A HARNESS RING

Height 2½ inches (6·4 cm)

From the upper part project the heads of two horned sheep.

A.130 PLATE LIII

HEAD OF A PIN IN THE FORM OF A BIRD

Height 2 inches (5·1 cm)

The bird is represented by its head and wing, the body being summarily indicated.

A.131 PLATE LIII

BRACELET

Diameter 2¾ inches (7 cm)

The open circlet terminates in animal heads.
Luristān, Third Phase.

A.132 NOT ILLUSTRATED

BRACELET

Diameter 4⅛ inches (10·5 cm)

The design is similar to that of A.131, but the circlet is of iron, and only the terminal heads are of bronze.
Luristān, Third Phase.

A.133 PLATE LIII

PIN

Length 5¼ inches (13·3 cm)

The head, in the form of the fore part of a bird, is a prolongation of the tapering shaft.
Luristān, Third Phase.

A.134 PLATE LIV

PAIR OF CONFRONTED FELINES ON FLASK-SHAPED SUPPORT

Height 12 inches (30·5 cm)

The animals, lions or panthers, have protruding eyes, gaping jaws and fantastically long necks. Their fore feet grasp a small ring and their hind feet rest upon another. A tubular pin, held vertically in the two rings, projects downward and fits loosely in the neck of the flask, which is hollow and is open at the base.
Luristān, Third Phase.

A.135 PLATE LIV

DAGGER WITH FAN-SHAPED POMMEL

Length 14 inches (35·6 cm)

A distinctive type. Schaeffer points out in *Stratigraphie*, p.478, that it is common to Luristān, Tālyche (Azerbaijān) and Tsalka (Caucasus).

Similar weapons are illustrated in *A Survey of Persian Art*, IV, pls.54 and 55. Some, though not of identical pattern, carry cuneiform inscriptions of the twelfth century B.C.
Luristān, Third Phase.

A.136 PLATE LIV

PAIR OF CONFRONTED FELINES

Height 4¼ inches (10·8 cm)

This piece, like the upper part of A.134, consists of a pair of confronted lions, but with the addition of two smaller ones clinging to their backs.
Luristān, Third Phase.

A.137 PLATE LIV

HANDLE IN THE FORM OF THE HEAD OF AN IBEX

Height 5⅝ inches (14·3 cm)

The hollow shaft is transfixed by a bronze pin to retain a whetstone or other implement. Similar handles have been found with the whetstone in place. (Cf. Godard, *Les Bronzes du Luristān*, pp.41 ff. and pl.XI and XII).
Luristān, Third Phase.

A.138 PLATE LV

SPIKED AND SOCKETED AXE-HEAD

Length 10 inches (25·4 cm)

This elegant type of axe was in use in many parts of Western Asia from about 2000 B.C. onward, but has appeared nowhere in such quantity and variety as in Luristān.

The distinctive features are the triangular blade which narrows and then widens and thickens as it approaches the socket, the four uniform spikes at the back of the socket, and the flanges which border the blade on both sides, growing narrower as they approach the cutting edge.
Luristān, Third Phase.

A.139 PLATE LV

SOCKETED AXE-HEAD

Length 4¾ inches (12 cm)

The long narrow blade projects from a stylized animal head with protruding eyes.
Luristān, Second Phase.

A.140 PLATE LV

SOCKETED AXE-HEAD

Height 4¾ inches (12 cm)

The straight blade flares into a crescent-shaped cutting edge. On the socket stands the figure of a lion with hollowed out eyes which may once have contained inlays. Below, on either side of the socket, is a writhing serpent in relief.
Luristān, Second Phase.
Described and illustrated in *A Survey of Persian Art*, I, p.266 and Fig.58.

A.141 PLATE LV

SOCKETED AXE-HEAD

Length 4¼ inches (10·8 cm)

The blade projects from a stylized animal head, similar to that of A.139.
Luristān, Second Phase.

A.142 PLATE LV

FRAGMENT OF A HANDLE

Height 3½ inches (9 cm)

The hollow socket, which may have held a whetstone or other implement, terminated in the heads of four lions with extended necks. Only two of the heads remain. A small loop projects from the side of the socket.
Luristān, Third Phase.

Chinese Jades

B.1 PLATE LVI

PLAQUE IN THE FORM OF A BIRD

Length 1¾ inches (4·4 cm)

The bird has a hooked beak somewhat resembling that of a cormorant, and a long crest curling over the back. The wing feathers are indicated by parallel ridges with sloping planes. There are two neatly drilled perforations for attachment.
Light brown nephrite with traces of red pigment.
Shang-Yin or Early Chou period.

For this and other jades on pl.LVI and LVII cf. those excavated in 1953 from Shang-Yin tombs at An-yang, and illustrated in the article by Ma Tê-chih and others in *K'ao ku hsüeh pao*, IX (1955), pls.16 and 17.

B.2 PLATE LVI

PLAQUE IN THE FORM OF A TIGER

Length 2½ inches (6·4 cm)

The principal features are indicated by engraved lines. Perforations for attachment at nose and tail.
Dark green nephrite with lighter patches.
Style of the Shang-Yin or Early Chou period, but probably later.

B.3 PLATE LVI

FLAT PENDANT IN THE FORM OF A FISH

Length 4¼ inches (10·8 cm)

The two sides are simply and identically carved, the eye, gills and fins (dorsal, pectoral and ventral) being indicated by engraved lines. There is a bi-conical perforation at the snout. The long upturned tail has a sharp edge and a pointed end.
Beige-coloured nephrite with traces of red pigment.
Shang-Yin or Early Chou period.

Similar fish-pendants exist in many collections, and may be implements designed to serve some practical purpose, e.g. scraping or engraving. They have been attributed to various periods from Shang-Yin to Han.

B.4 PLATE LVI
FLAT PENDANT IN THE FORM OF A FISH
Length 3¼ inches (8·3 cm)

The execution is similar to that of B.3.
Light green nephrite decomposed in parts and with traces of red pigment.
Shang-Yin or Early Chou period.

B.5 PLATE LVI
THIN PLAQUE IN THE FORM OF A STYLIZED TIGER
Length 1½ inches (3·7 cm)

The plaque is only two millimetres in thickness and very finely worked. The design is engraved in double lines and the surfaces between the engraving are rounded to produce the effect of carving in relief. There are two neat perforations for attachment.
Light brown nephrite decomposed in parts and with traces of red pigment.
Shang-Yin or Early Chou period.

B.6 PLATE LVI
BOVINE MASK
Height and width 1⅛ inches (2·9 cm)

The modelling is in full rounded relief, as in the free-standing masks on the shoulders of First Phase bronzes.
White nephrite.
Shang-Yin or Early Chou period.

B.7 PLATE LVI
PLAQUE IN THE FORM OF A STYLIZED BIRD
Length 2 inches (5 cm)

The principal features, eye, crest and foot, are indicated by engraved lines. Conical perforation at the beak.
Brownish green nephrite partly decomposed.
Shang-Yin or Early Chou period.

B.8 NOT ILLUSTRATED
PAIR OF MINIATURE PLAQUES IN THE FORM OF (?) *K'UEI* DRAGONS
Length 1¼ inches (3·2 cm)

Cream-coloured nephrite.
Shang-Yin or Early Chou period.

B.9 NOT ILLUSTRATED
MINIATURE ANIMAL HEAD
Height ⅝ inch (1·6 cm)

The head is modelled in the round with ears erect.
Light green nephrite partly decomposed and with traces of red pigment.
Probably pre-Han.

B.10 PLATE LVII
PENDANT IN THE FORM OF AN OWL WITH OUTSPREAD WINGS
Width 2 inches (5·1 cm)

A remarkable example of primitive stylization. The pendant has been symmetrically shaped from the slab, apparently without metal tools, and the grooves indicating the neck, eyes and stylized feathers ground out with stone or bamboo pencils. Suspension was by a neatly-drilled bi-conical perforation at the back of the neck.
Light green nephrite altered to white in parts.
Neolithic technique. Probably Shang-Yin period.
In the International Exhibition of Chinese Art. Venice 1954 (Catalogue No.173).
Illustrated in *Catalogue of the Exhibition of Chinese Jades by the Oriental Ceramic Society*, 1948, pl.IV, No.33; in S. H. Hansford, *Chinese Jade Carving*, 1950, pl.XV; and in *The New Chambers's Encyclopaedia*, 1950, article 'Jade', pl.II.

B.11 PLATE LVII
COUCHANT ANIMAL, ? CERVINE
Length 1¾ inches (4·4 cm)
Thickness ⅜ inch (1 cm)

The animal is carved from an unusually thick slab. The salient features are indicated in a simple though lively manner, but there is little attempt at modelling in the round. The body carries a design of squared spirals.
Light green nephrite, most of the surface turned to white by decomposition.
Shang-Yin or Early Chou period.
In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.176).

B.12 PLATE LVII
BOVINE MASK, *T'AO-T'IEH*
Width 2 inches (5 cm)

The mask is cut from a slab, and the face and horns are modelled by bevelling. The eyes are indicated by incised lines. The perforation in the nose has been neatly drilled with a metal tool, and two low, wedge-shaped lugs project from the reverse side. By

means of these and the perforation the mask was, no doubt, fixed as an ornament to some larger object which had perished before excavation.
The material is cream-coloured and retains a high polish, but the specific gravity is now much lower than that of nephrite. An X-ray examination of two fragments, one from each side of the specimen, undertaken by Dr. F. A. Bannister of the British Museum (Natural History), revealed the presence of amphibole fibres, and the material appears to be jade which has undergone almost complete chemical alteration as a result of long burial.
Shang-Yin period. Acquired by the author at the site of the Shang-Yin capital, near An-yang.
Illustrated in *Catalogue of the Exhibition of Chinese Jades by the O.C.S.*, 1948, pl.IV, No.29; in S. H. Hansford, *Chinese Jade Carving*, 1950, pl.XV; and in Hansford, *A Visit to An-yang* (China Society, 1951) pl.VIII.

B.13 PLATE LVII
FISH WITH CURLED SNOUT
Length 3⅛ inches (7·9 cm)

The execution is similar to that of B.3 and 4, but the dorsal fin is erect and the presentation livelier, as of a fish leaping.
Yellowish green nephrite altered to white in parts and with traces of red pigment.
Shang-Yin or Early Chou period.
In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.180).

B.14 PLATE LVII
FRAGMENT OF CARVED BONE OR IVORY
Height 2⅛ inches (5·4 cm)

The design recalls that of some An-yang bronzes. A *t'ao-t'ieh* mask of bovine type, carved in polished relief on a background of squared spirals (*lei wên*), merges with a second *t'ao-t'ieh* placed below it. There are borders of 'key pattern', somewhat resembling the flanges of A.1 (frontispiece), on the left and right. Traces of red pigment.
Shang-Yin period.
In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.178).

B.15 NOT ILLUSTRATED
IRREGULAR FRAGMENT OF CARVED BONE
Dimensions 6 × 1½ inches (15·2 × 3·8 cm)

The design comprises *t'ao-t'ieh* masks on a ground of squared spirals, and resembles such designs on bronzes and white pottery from An-yang.
Shang-Yin period.

B.16 PLATE LVIII
FISH WITH LONG SNOUT
Length 4½ inches (11·4 cm)

The fish is carved as a plaque six millimetres thick, but narrowing towards the head, the features of which are represented by superficial carving. The body is covered with a complex of spirals, carved in well-rounded relief to represent scales. Midway along the body is a neat cylindrical perforation.
Light green nephrite.
Late Chou period.
A similar fish from the Chin Ts'un find is described and illustrated in White, *Tombs of Old Lo-yang*, p.132 and pl.CXXVII.

B.17 PLATE LVIII
RITUAL DISC, *PI*
Diameter 4½ inches (11·4 cm)

The disc is a *ku pi*, 'grain-pattern *pi*', the surface being covered with rows of spiral protuberances resembling sprouting grains. The *Chou li* states that *ku pi* were the insignia of *tzŭ*, 'viscounts', the fourth grade of the ancient nobility.
Light green nephrite with large areas of light brown, decomposed in parts.
Late Chou period.
A similar disc from the Chin Ts'un find is described and illustrated in White, *Tombs of Old Lo-yang*, p.130 and pl.CXXI.

B.18 PLATE LVIII
TONGUE AMULET IN THE FORM OF A CICADA
Length 2⅛ inches (5·4 cm)

The back and underside of the insect are fully rounded, with their features simply and vigorously engraved.
Light green nephrite with whitish areas, decomposed in parts.
The simplicity of the form and carving suggests an early date, perhaps pre-Han (cf. B.20).

B.19 PLATE LVIII
FITTING IN THE FORM OF A DRAGON
Height 2½ inches (6·4 cm)

The body of the dragon is six millimetres thick, slightly rounded, and ornamented with delicately incised curls. A remarkable design and an accomplished piece of carving. It may have been a handle of a vessel made of some other material.
Very pale green nephrite.

Late Chou period.
In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.205).

B.20 PLATE LVIII
TONGUE AMULET IN THE FORM OF A CICADA
Length 2 inches (5·1 cm)

The body of the insect is flatter than that of B.18, but the carving is more accomplished and more details are shown.
Nephrite, originally dark green, but most of the surface altered through decomposition to a pinkish white.
Han period.
This piece closely resembles the tongue amulet found in the Han period grave, No.9, at Lo-lang, Korea (see T. Sekinō and others, *Rakurō-gun jidai no iseki*, Archæological Researches on the Ancient Lo-lang District, pl.136).

B.21 NOT ILLUSTRATED
PENDANT IN THE FORM OF AN INSECT
Length $1\frac{1}{8}$ inches (2·9 cm)

The insect may be a larval cicada. The back is rounded with some details incised. The eyes protrude, and there is a bi-conical perforation at the nose.
Nephrite of old ivory colour.
Han period or perhaps earlier.

B.22 PLATE LIX
PERFORATED DISC, *PI*
Diameter $3\frac{1}{4}$ inches (8·3 cm)

The surface is covered with small protuberances or 'grains' like that of B.17 but without spirals.
Light green nephrite, flecked with brown.
Period doubtful, possibly Han.

B.23 PLATE LIX
PERFORATED DISC, *HUAN*
Diameter $2\frac{1}{2}$ inches (6·4 cm)

The surface is decorated with a complex of interlocking spirals, skilfully composed.
Cream-coloured nephrite flecked with brown.
Period doubtful, Han or later.

B.24 PLATE LIX
PERFORATED DISC, *YÜAN*
Diameter $3\frac{5}{8}$ inches (9·2 cm)

The disc is quite plain and somewhat irregular in shape. The thickness varies from two to five millimetres.
White nephrite with brown patches.
Period doubtful, possibly neolithic.
The three discs grouped on this plate show the distinctive proportions of the *pi*, the *huan* and the *yüan*. Perhaps all such discs were primarily ritual objects, and the most ancient ones may all have been called *pi* (see p.31) and used as symbols of Deity. But the *Êrh ya*, a glossary of terms used in ancient writings and believed to date from the third or second century B.C., explains that if the 'flesh' or body is twice the width of the orifice, the object is called a *pi*; if the orifice is twice the width of the body, it is called a *yüan*; whilst if the body and orifice are of equal width, it is called a *huan*. Most discs conform approximately to one of these prescriptions, and are designated by the Chinese accordingly.

B.25 PLATE LIX
CEREMONIAL DAGGER-AXE, *KO*
Length $11\frac{7}{8}$ inches (30·2 cm)

The blade is without ornament apart from an engraved line parallel to the cutting edge and the pattern of lozenge-like forms, where it would meet the wooden haft. The conical perforation and the slots at the end of the tang would enable the weapon to be secured in the haft.
Light green nephrite, decomposed in parts.
Probably Shang-Yin period.
A nearly identical specimen is illustrated in Huang Chün, *Yeh chung p'ien yü* (Antiquities from An-yang), I, ii, 18.

B.26 PLATE LX
ELONGATED FELINE
Length 4 inches (10·3 cm)

The animal is carved from a narrow plaque like the fish B.16, but the edges are bevelled to give the impression of carving in the round. The features of the head and limbs are indicated by lightly incised lines, and the finish is beautifully smooth and pleasant to the touch.
Light green nephrite.
Han period or later.

B.27 PLATE LX
BELT HOOK, *TAI KOU*
Length 3 inches (7·6 cm)

The head is that of a two-horned dragon, fully rounded, and the body is ornamented with 'grains' similar to those of the ritual disc B.17. At the back is a round projecting stud for attachment, as on B.28.
Light brownish green nephrite.
Sung period or later.

B.28 PLATE LX
BELT HOOK, *TAI KOU*
Length $3\frac{3}{8}$ inches (8·6 cm)

The head is that of a horse with curling mane, and the body is ornamented with interwoven bands above and squared spirals at the sides.
White nephrite.
Sung period or later.

B.29 PLATE LX
BELT HOOK, *TAI KOU*
Length $4\frac{7}{8}$ inches (12·4 cm)

The hook is of rectangular section, and the surface is lightly incised with lines suggestive of the fur or scales of the animal in whose head the hook terminates.
Creamy white (?) nephrite, decomposed in parts.
Late Chou or Han period.
Similar hooks from the Chin Ts'un find are described and illustrated in White, *Tombs of Old Lo-yang*, p.144 and pl.CLII.

B.30 NOT ILLUSTRATED
TOOTH-SHAPED PENDANT
Length $4\frac{3}{8}$ inches (11 cm)

The form is that of a flat plaque 2 inches wide at the top and tapering to a blunt point. It is surmounted by a dragon, and the surface is engraved with heart-shaped curls of irregular size and form.
Ivory-coloured nephrite with some brown patches.
Period doubtful.
A similar piece is figured in Wu Ta-ch'êng. *Ku yü t'u k'ao*, f.106, and there described as a *ta hsi* 大觿, 'large knot-loosener'. Wu's illustration is reproduced in Laufer, *Jade*, p.241.

B.31 PLATE LXI
SWORD-SCABBARD FITTING, *CHIEN CHIH*
Length $3\frac{3}{4}$ inches (9·5 cm)

The upper surface is carved in high under-cut relief with the figure of a feline (so-called *ch'ih hu*) playing with its cub. Both animals are in attitudes of remarkable grace and agility. The under-side is shaped as that of B.32.
Light green nephrite, with flecks of brown 'skin'.
Han period.
In the International Exhibition of Chinese Art, Venice, 1954 (Catalogue No.223).
I have explained in *A Glossary of Chinese Art and Archaeology*, p.15, my belief that the *ch'ih hu* was originally a conventional representation of a lion.

B.32 PLATE LXI
SWORD-SCABBARD FITTING
Length $4\frac{1}{4}$ inches (10·8 cm)

The design is similar to that of B.31.
Light green nephrite with brown patches.
Han period.
These fittings were devised for the suspension of the scabbard from the wearer's belt. The jade was attached to the outer-side of the scabbard, and a strap was passed through the slot. The discovery at Lo-lang of a sword and scabbard with the jade in position set at rest speculation as to the use of this object. The method of attachment is shown in Sekinō, *Rakurō-gun jidai no iseki*, pls.41 and 42.

B.33 PLATE LXI
SWORD-SCABBARD FITTING
Length $2\frac{1}{2}$ inches (6·4 cm)

The design in low relief is of dragons among waves. The under-side is shaped as that of B.32.
Light green nephrite with large areas of brown 'skin'.
Period doubtful, perhaps Han.

B.34 PLATE LXI
SWORD-SCABBARD FITTING
Length $1\frac{7}{8}$ inches (4·8 cm)

The design is a symmetrical arrangement of double spirals and pointed petal-like forms in low relief. On the under-side is a slotted projection similar to that of B.32.
White nephrite with traces of brown 'skin'.
Han period.
The decoration resembles that of the scabbard-fitting from Lo-lang. Sekinō, *op. cit.*, pl.41.

B.35 PLATE LXI
RECTANGULAR BELT PLAQUE
Length $3\frac{1}{2}$ inches (8·8 cm)

The surface is carved in high relief with figures of a feline and a ram-headed dragon-like creature sporting with a branch of fungus. At the back are two square protuberances, hollowed and slotted for attachment.

Nephrite of old ivory colour, light brown in parts.

Style of the Han period, but probably later.

B.36 PLATE LXII
TABLET, *KUEI*
Length $7\frac{1}{8}$ inches (18·2 cm)

The form appears to derive from that of a primitive axe, and is identified by Chinese antiquarians with the *kuei*, according to the *Chou li* a symbol of rank carried by certain of the ancient nobility. The ornament consists of a *t'ao-t'ieh* mask, double spirals, and forms derived from the cicada. There is a large conical perforation at the narrower end.

Yellowish green nephrite, flecked with brown.

This piece may be a primitive object, re-cut and decorated in the Sung period or later.

B.37 PLATE LXII
STYLIZED HUMAN FIGURE
Height $7\frac{1}{2}$ inches (19 cm)

The form and features are much simplified, the eyes and mouth being indicated only by faint incisions. The hands are concealed by the robe, and the figure terminates, at the lower extremity, in a blunt point. It is perforated transversely at the neck, which suggests that it was made to be suspended from a cord and used as an implement.

Green nephrite with large areas of brown 'skin'.

Period doubtful.

Two similar, but smaller figures are illusted in *Relics of Han and Pre-Han Dynasties*, Catalogue of the Exhibition at the Imperial Household Museum, Tokyo, 1932, pl.XXXII, and there attributed to the Han period.

B.38 PLATE LXII
RECUMBENT BIRD
Length 5 inches (12·7 cm)

The bird lies extended and flattened, as if to escape detection on the ground.

Light green nephrite with patches of dark brown on the head, back and wings.

Period doubtful.

B.39 NOT ILLUSTRATED
RECUMBENT ANIMAL RESEMBLING A PIG
Length $3\frac{7}{8}$ inches (9·8 cm)

The animal is stylized, the body being of cylindrical form and the features summarily indicated.

Light green nephrite flecked with brown.

Han period. The type is well known, and was placed chronologically through a specimen having been found in the Han Dynasty grave No.9 at Lo-lang, Korea. See Sekinō, *Rakurō-gun jidai no iseki*, pl.66.

B.40 PLATE LXIII
FRAGMENT COMPRISING THE NECK AND HEAD OF AN ANIMAL
Length $4\frac{1}{2}$ inches (11·4 cm)

The head of this creature somewhat resembles that of a horse, with large ears and eyes and other features expressed by ridges in low relief. There is a large bi-conical perforation through the neck.

Light greenish yellow nephrite with areas of light brown 'skin'.

Period doubtful. There is a complete example in the Musée Guimet, in which the neck, of similar thickness throughout, continues to curve in a circle until it terminates in a flat surface confronting the flat undersurface of the nose.

B.41 PLATE LXIII
PERFORATED DISC, *PI*
Diameter $7\frac{3}{4}$ inches (19·7 cm)

The disc is roughly shaped but ornamented with the graceful and lively figures of two felines in high undercut relief. One holds a fungus in its mouth. On the reverse side are incised four *t'ao-t'ieh* of bovine type symmetrically arranged.

Green nephrite with brown areas.

Period doubtful.

B.42 PLATE LXIV
UNIDENTIFIED OBJECT
Length 8 inches (20·3 cm)

An elaborate openwork carving consisting of a symmetrical complex of confronted dragons, their bodies intertwined with each other and with vegetal scrolls. It could be used as a writer's brush rest. Another suggested use is as part of a head-dress. The design and execution are admirable.

White nephrite with patches of brown discoloration.

Period doubtful, perhaps Sung.

B.43 PLATE LXV
TWO-HANDLED CUP
Width $5\frac{1}{2}$ inches (14 cm)

The cup is formed of the conjoined bodies of two ducks, each with freely carved head turned back to the vessel to form a handle. The surface is carved to represent the feathers of the birds, the waves, and the buds and leaves of lotus. An ingenious and beautiful design.

Light green nephrite with patches and flecks of brown 'skin'.

Perhaps Ming period.

B.44 PLATE LXVI
RECUMBENT GOAT WITH KIDS
Length $6\frac{1}{2}$ inches (16·5 cm)

The carving is naturalistic apart from a conventional pattern along the spine, terminating in a fungus-like form at the tail.

Dark green nephrite, veined with black in parts.

Probably eighteenth or nineteenth century.

B.45 PLATE LXVI
INK-STONE
Length $7\frac{3}{4}$ inches (19·7 cm)
Width $6\frac{3}{4}$ inches (17·2 cm)

The form is that of a phoenix, flattened and highly conventionalized. The ink is ground on the flat, slightly concave area, and mixed with water from the cavity below the bird's head.

Light green nephrite with areas of brown 'skin', especially on the underside.

Period doubtful, possibly Sung.

B.46 PLATE LXVII
COUCHANT DEER
Length $4\frac{5}{8}$ inches (11·7 cm)

The forefeet are drawn up, as if the animal were about to rise. From the mouth hangs a long spray of fungus, *ling chih*.

Light green nephrite with close russet mottling.

Period doubtful.

B.47 PLATE LXVII
BOWL OF IRREGULAR FORM
Length $5\frac{1}{4}$ inches (13·3 cm)

The bowl has been carved to conform with and reveal the roughly oblong shape of the jade pebble.

Grey nephrite flecked with black. The brown 'skin' has been polished to a fine mahogany tone.

Period doubtful.

B.48 PLATE LXVIII
SITTING DUCK
Length 7 inches (17·6 cm)

The bird holds a fish in its beak.

Dark green nephrite shading to lighter green on neck and breast.

Period doubtful, probably eighteenth century.

B.49 PLATE LXIX
TWO PLAQUES SHAPED AS COMB BACKS
Length $4\frac{7}{8}$ inches and $4\frac{3}{4}$ inches (12·4 cm and 12·1 cm)

On the front of each is the figure of a flying goddess, *apsaras* or *t'ien nü*, with floating draperies, such as may be seen in paintings of Buddhist paradises. One plays a flute, *hsiao*, the other a guitar, *p'i-pa*. On the reverse of each plaque are two flying geese.

White jade, much decomposed and altered to a light buff colour by burial, and perhaps by fire.

Probably T'ang period.

B.50 NOT ILLUSTRATED
PHOENIX, *FÊNG-HUANG*
Length $3\frac{1}{4}$ inches (8·3 cm)

Carved to conform with the shape of the jade pebble.

White nephrite, with traces of reddish brown 'skin'.

Eighteenth century.

B.51 NOT ILLUSTRATED
GOOSE RESTING
Length 2¾ inches (7 cm)

Carved to conform with the shape of the jade pebble.

Light greenish yellow nephrite, with traces of brown 'skin'.

Period doubtful.

B.50 and 51 are *pa wan*, 'fondling pieces', jades designed to be appreciated when held in the hand and to give tactile enjoyment.

Sculpture in Stone, Wood and Iron

C.1 PLATE LXX
FRAGMENT OF A PLAQUE WITH PROCESSIONAL SCENE
Length 7½ inches (19 cm)

The procession, carved in low relief, comprises two horsemen, followed by a two-wheeled carriage drawn by a third horse. The animals are sturdy but mettlesome steeds, and the scene is one of considerable animation.

A bronze pin projects from the upper edge of the plaque.

Han period or somewhat later. The theme is a familiar one in the bas-reliefs of the Later Han Dynasty at the Wu family mausoleum at Chia-hsiang, Shan-tung, but the horses are here treated more in the manner of pottery models of the Six Dynasties.

C.2 PLATE LXXI
SEATED BODHISATTVA
Height 7¾ inches (19·7 cm)

The figure is crowned and robed. It has evidently been cut from the stone wall of a shrine. The position of the remains of the hands suggest that they were in *añjali mudrā*, the gesture of adoration. Figure, features and draperies are typical of the Northern Wei period (386–535). These and the material, weathered sandstone, point to the Yün-kang cave temples as the place of origin.

Fifth century A.D.

C.3 PLATES LXXII AND LXXIII (TWO POSITIONS)
HEAD OF A BUDDHA
Height 9⅞ inches (25 cm)

The features and expression are typical of the Northern Wei period. These and the material, weathered sandstone, point to the Yün-kang cave temples as the place of origin.

Fifth century A.D.

C.4 PLATE LXXIV
RECTANGULAR PANEL WITH THE FIGURE OF A DANCER
Length 13¾ inches (35 cm)

The panel is recessed and the dancer is carved in relief. She wears a short upper garment, with long sleeves falling over the hands, and a skirt reaching to the feet. A long, waving scarf passes over the two extended arms, and fillets flutter from the

head-dress. The raised border of the panel is incised with flowers and foliage. It appears to be an architectural embellishment, perhaps one of a series decorating the walls of a pagoda.

T'ang period or earlier.

C.5 PLATE LXXV
STANDING BODHISATTVA
Height 1 foot 7¼ inches (49 cm)

The material is soft, white limestone, the surface of which has acquired a yellowish tone.

The figure wears a crown, from which fillets depend, a closely fitting upper garment, a pleated skirt and a long scarf falling from the shoulders. It stands on a lotus pedestal, with a lotus bud in the left hand and a halo behind the head.

Style of the Sui period, but probably later.

C.6 PLATE LXXVI
SAKYAMUNI BUDDHA AS A HERMIT
Height 11⅝ inches (29·5 cm)

The Buddha is seated in meditation on a base ornamented with conventionalized lotus petals. The body is elongated to suggest emaciation. The *uṣṇīṣa* (see page 35) is covered with large spirals, representing curled hair, and extends to the full width of the skull. The hands rest upon one drawn-up knee, and the chin upon the hands. There are traces of colour and gold lacquer. The Master is here represented at the period of his life when he is said to have undergone extremes of fasting prior to his realization that enlightenment was not to be attained by such means.

Perhaps Yüan or Ming period.

Similar statues are illustrated in O. Sirén, *A History of Early Chinese Art* (*Sculpture*), pl.120, and attributed to the Yüan.

C.7 PLATE LXXVI
HEAD OF A BUDDHA
Height 3¼ inches (8·3 cm)

White marble. At the back is a projection, perhaps for attachment of a halo.

Probably Sung period.

C.8 PLATE LXXVI
KNEELING FIGURE, (?) MUSICIAN WITH DRUM
Height 4¾ inches (12·1 cm)

Perhaps T'ang period.

C.9 PLATE LXXVII
RECUMBENT PIG ON A FLAT BASE
Length 8½ inches (21·5 cm)

Period doubtful.

C.10 PLATE LXXVII
RECUMBENT HARE
Length 3¼ inches (8·3 cm)

White marble.

Period doubtful.

C.11 NOT ILLUSTRATED
TWO RECUMBENT LIONS ON A RECTANGULAR BASE
Length 8½ inches (21·5 cm)

One of the animals grasps a ball, the other the remains, apparently, of a cub.

Perhaps Ming period.

C.12 PLATES LXXVIII AND LXXIX (TWO POSITIONS)
UPPER PART OF A WOODEN STATUE
Height 1 foot 2 inches (35·5 cm)

The robe falls in pleats from the shoulders, and the sleeves conceal the hands folded in front of the body. There are traces of red, green and white paint. It appears that some object once rested upon the folded hands, possibly an emblem which would have identified the figure with a Buddhist saint, one of the Arhats, or Lo-han. The Lo-han cult in China was at first directed to some of the Buddha's principal disciples and of the patriarchs, but later included many other persons with some historical associations, to whom extravagant legends of sanctity and miraculous powers were attached.

Perhaps Sung period.

C.13 PLATE LXXX

IRON FIGURE OF A BODHISATTVA

Height 1 foot 4 inches (40·6 cm)

The figure sits in an attitude of meditation with eyes closed. The right leg crosses and rests upon the left above the knee, and the right elbow rests upon the thigh, with the forefinger touching the cheek. The Bodhisattva wears a high crown, from which depend fillets, and a long close-fitting robe.

Korean. Probably Koryŏ period. (A.D.936–1392.) A competent Japanese authority has suggested the eleventh century.

A bronze figure somewhat similar in style, in the same attitude, and said to represent Maitreya, is illustrated in Sekinō, *Chosen koseki zufu*, III, p.383.

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Abbreviations

BMFEA *Bulletin of the Museum of Far Eastern Antiquities, Stockholm*
JRAS *Journal of the Royal Asiatic Society, London*
TOCS *Transactions of the Oriental Ceramic Society, London*

Historical and General

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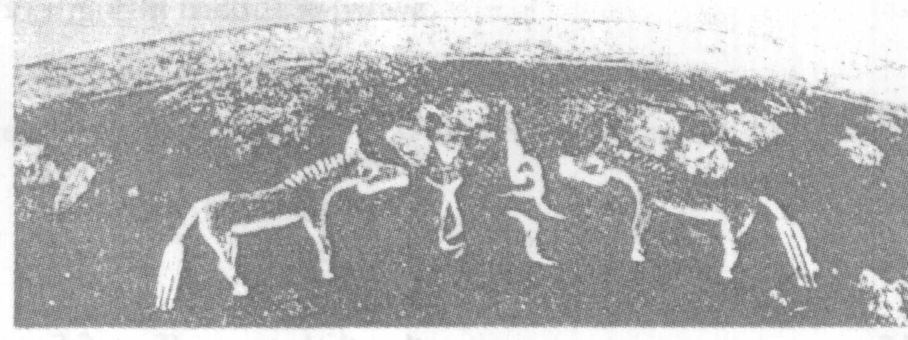


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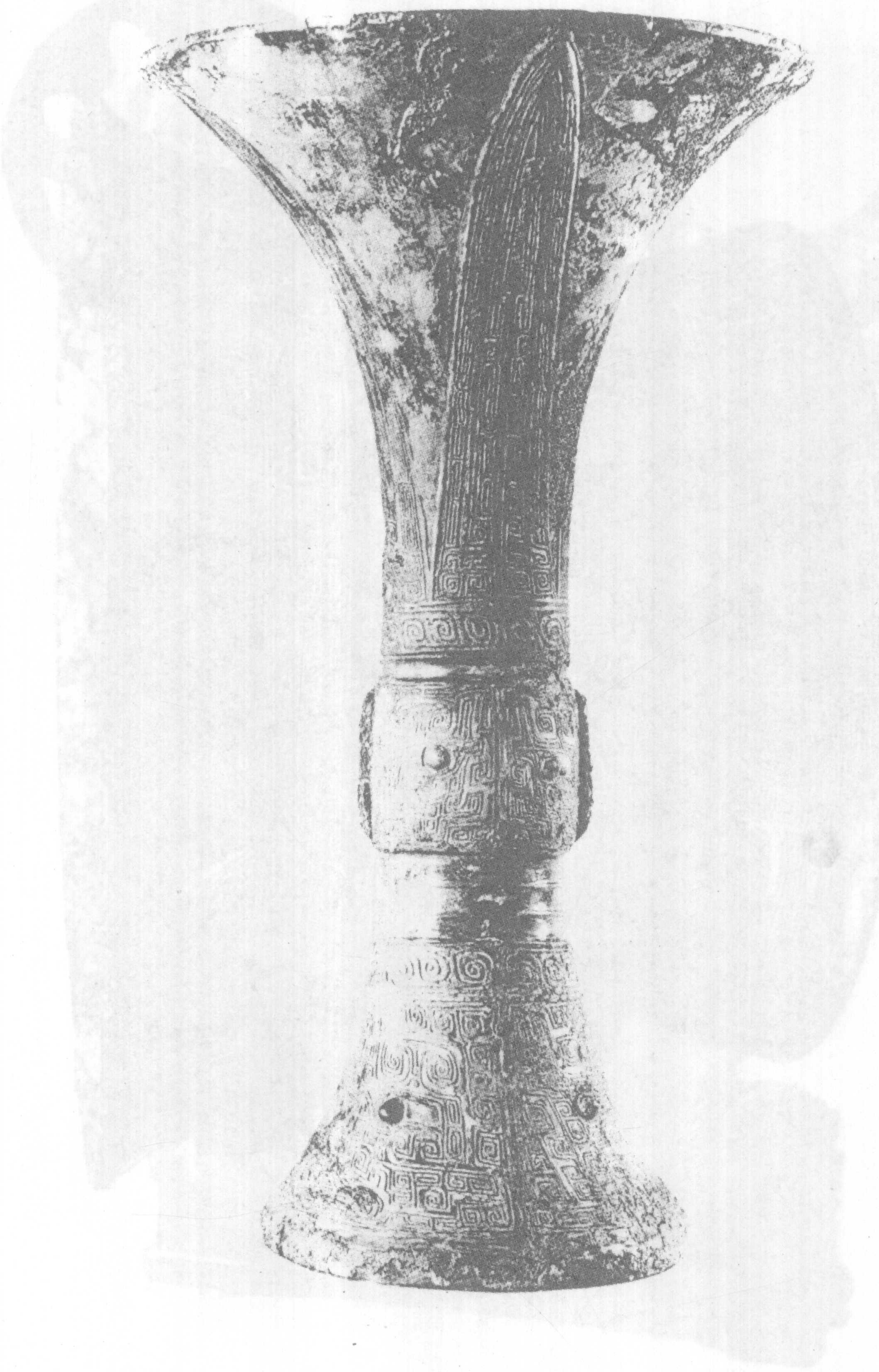
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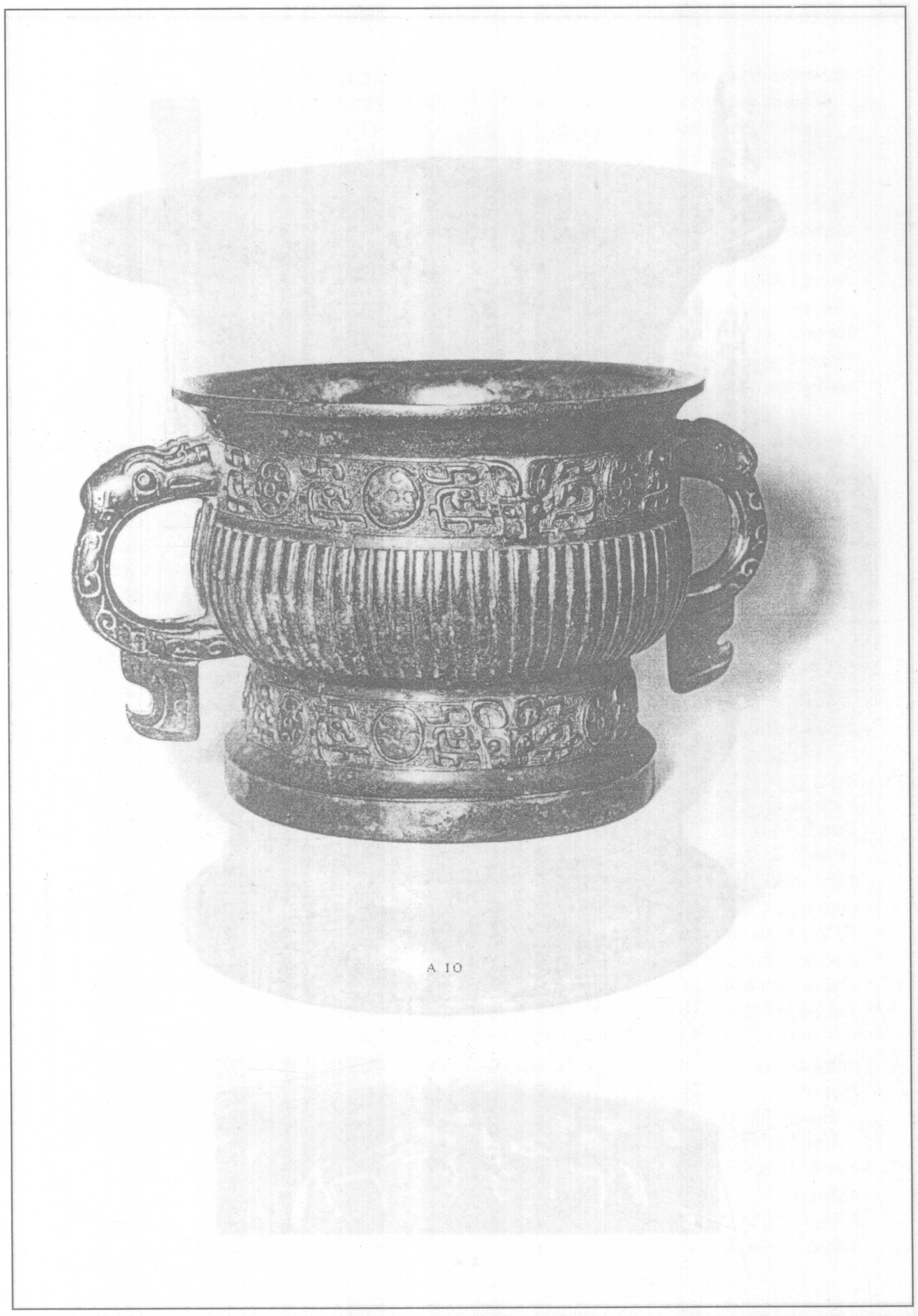
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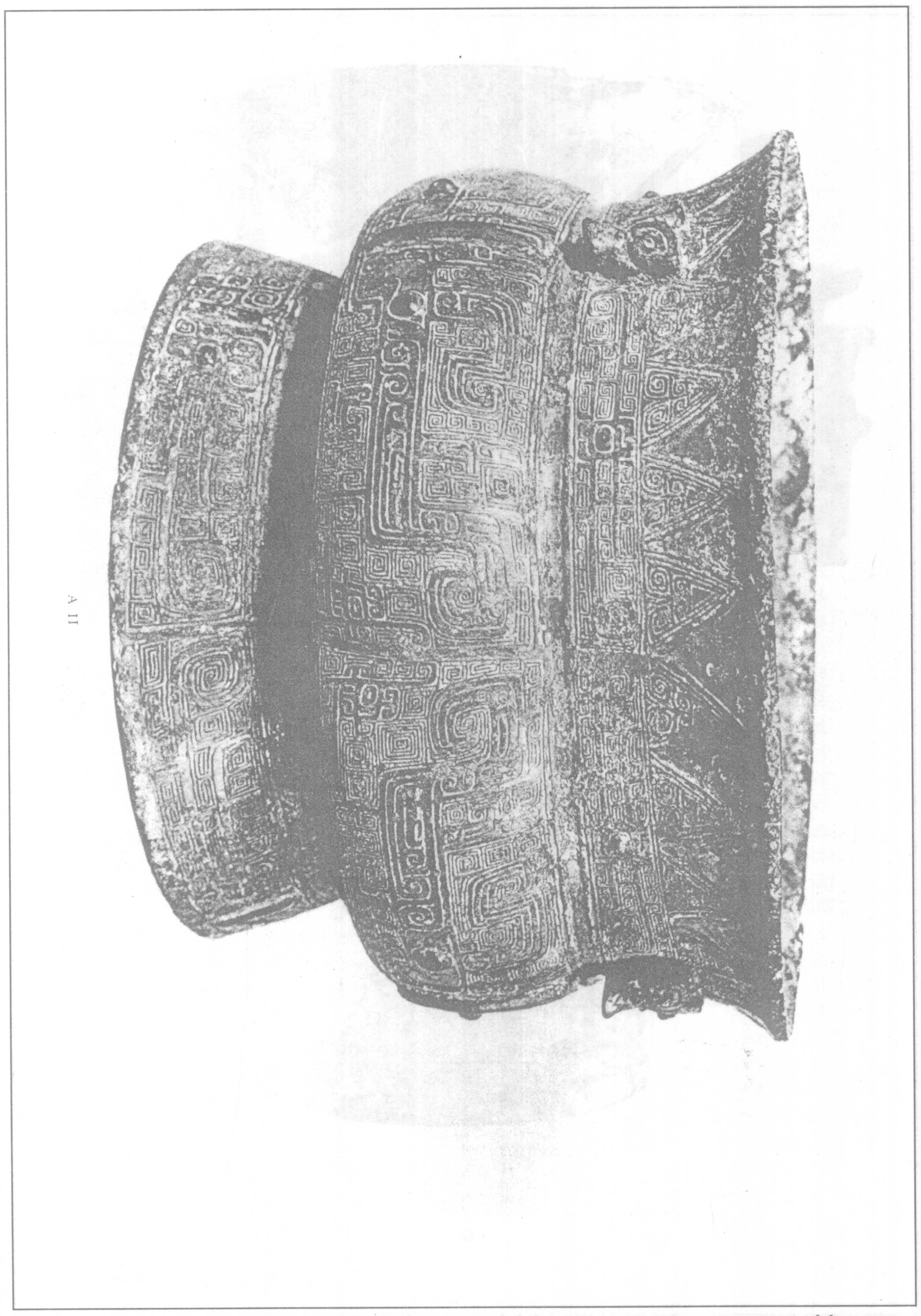
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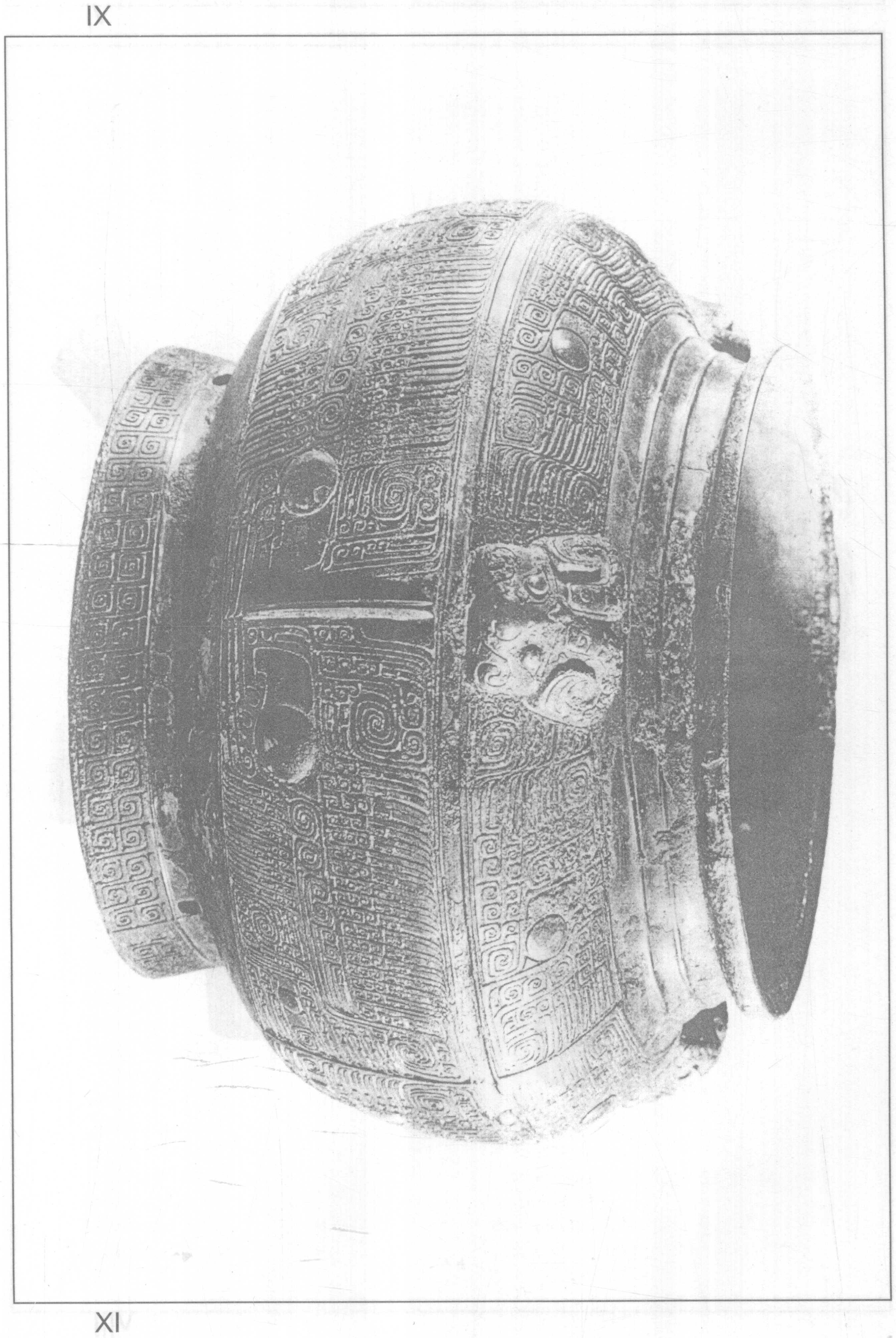
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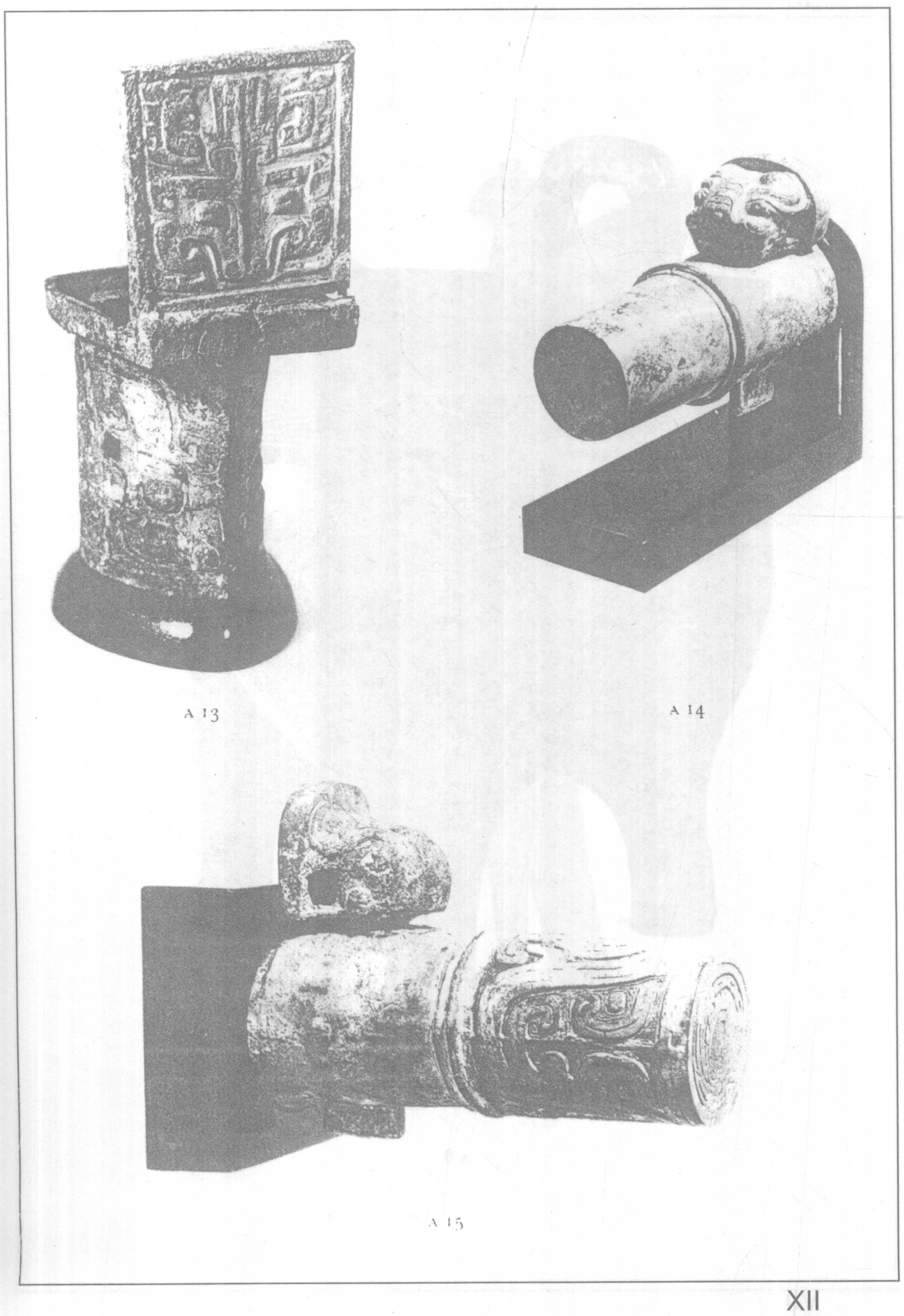


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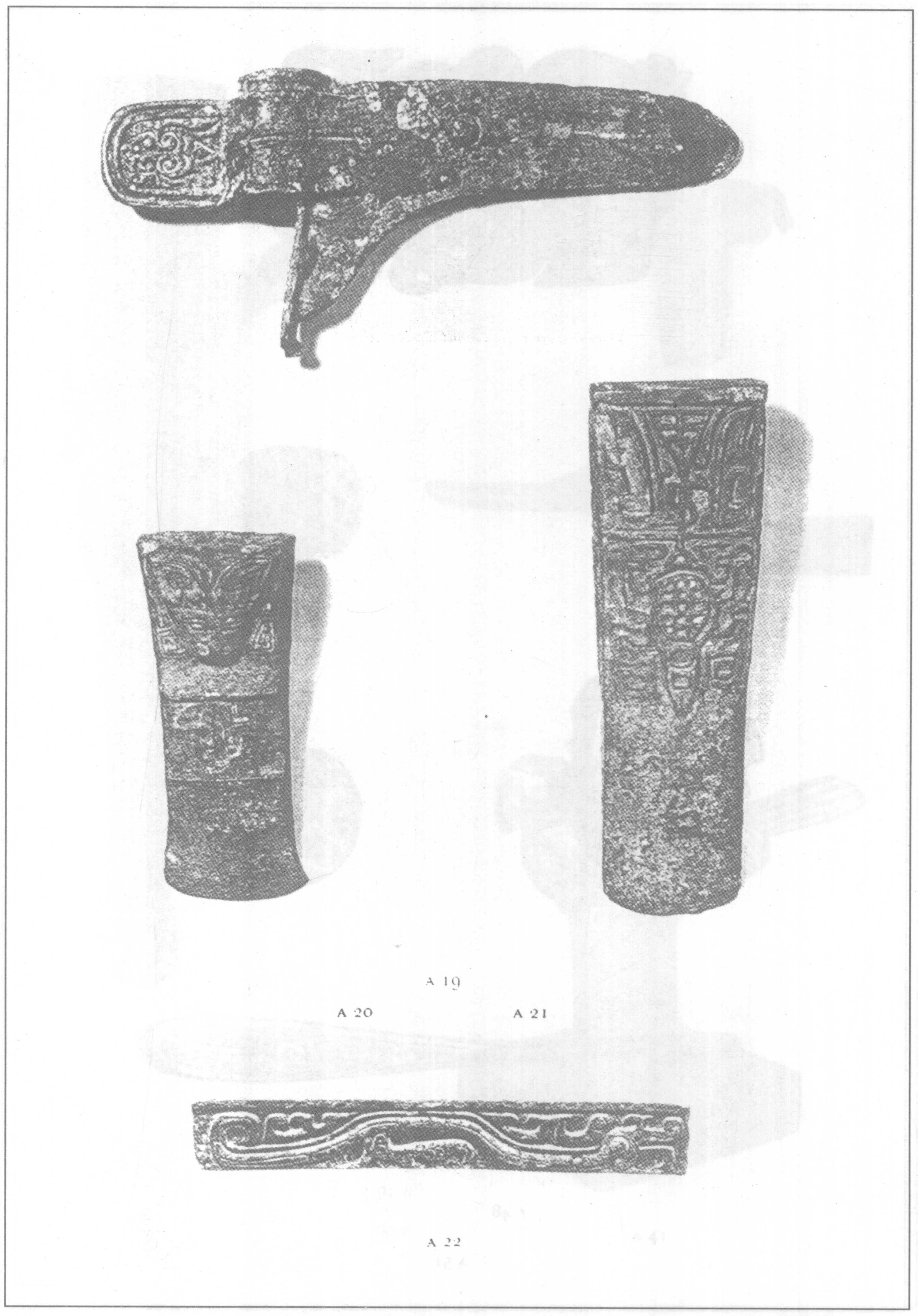


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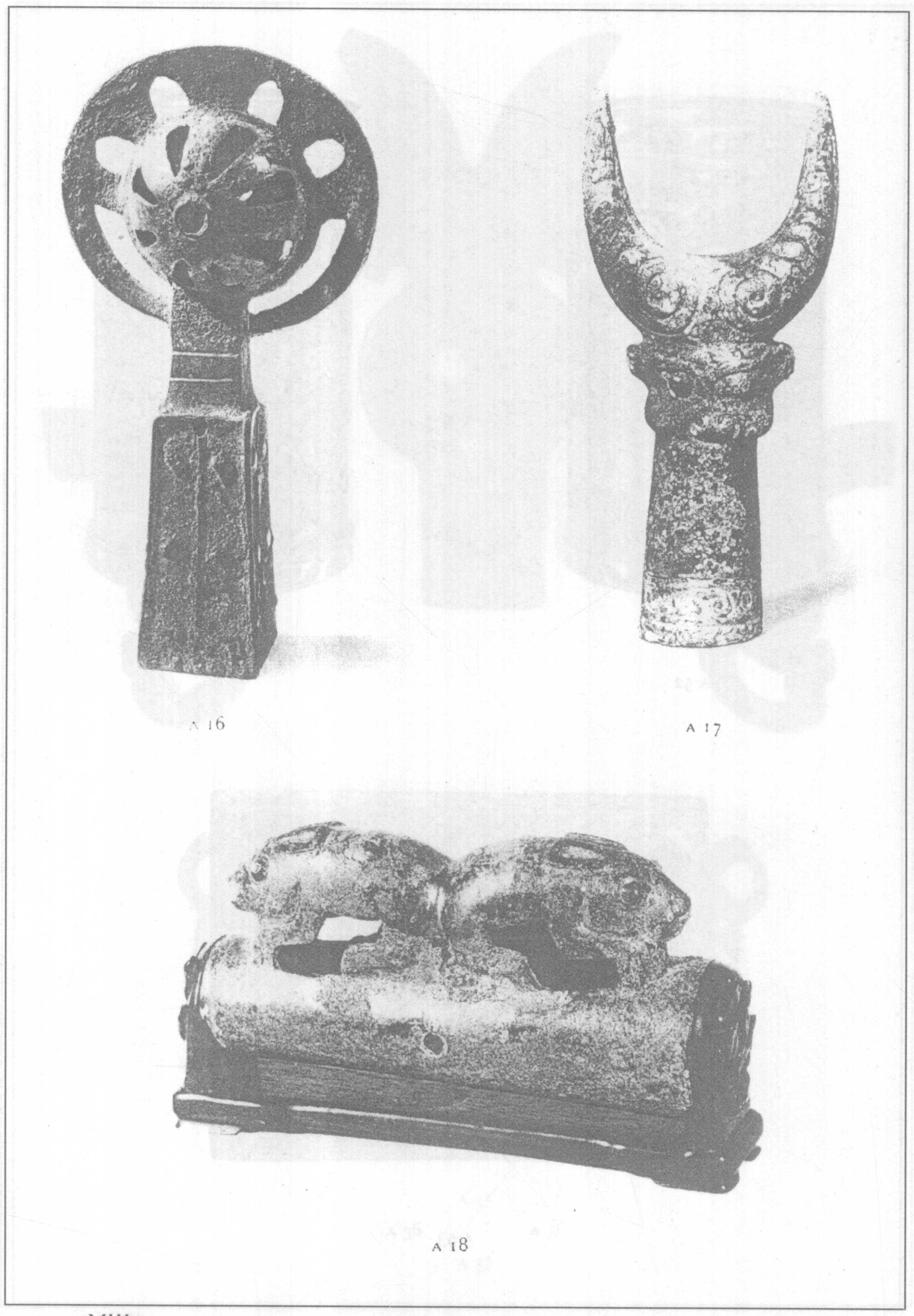


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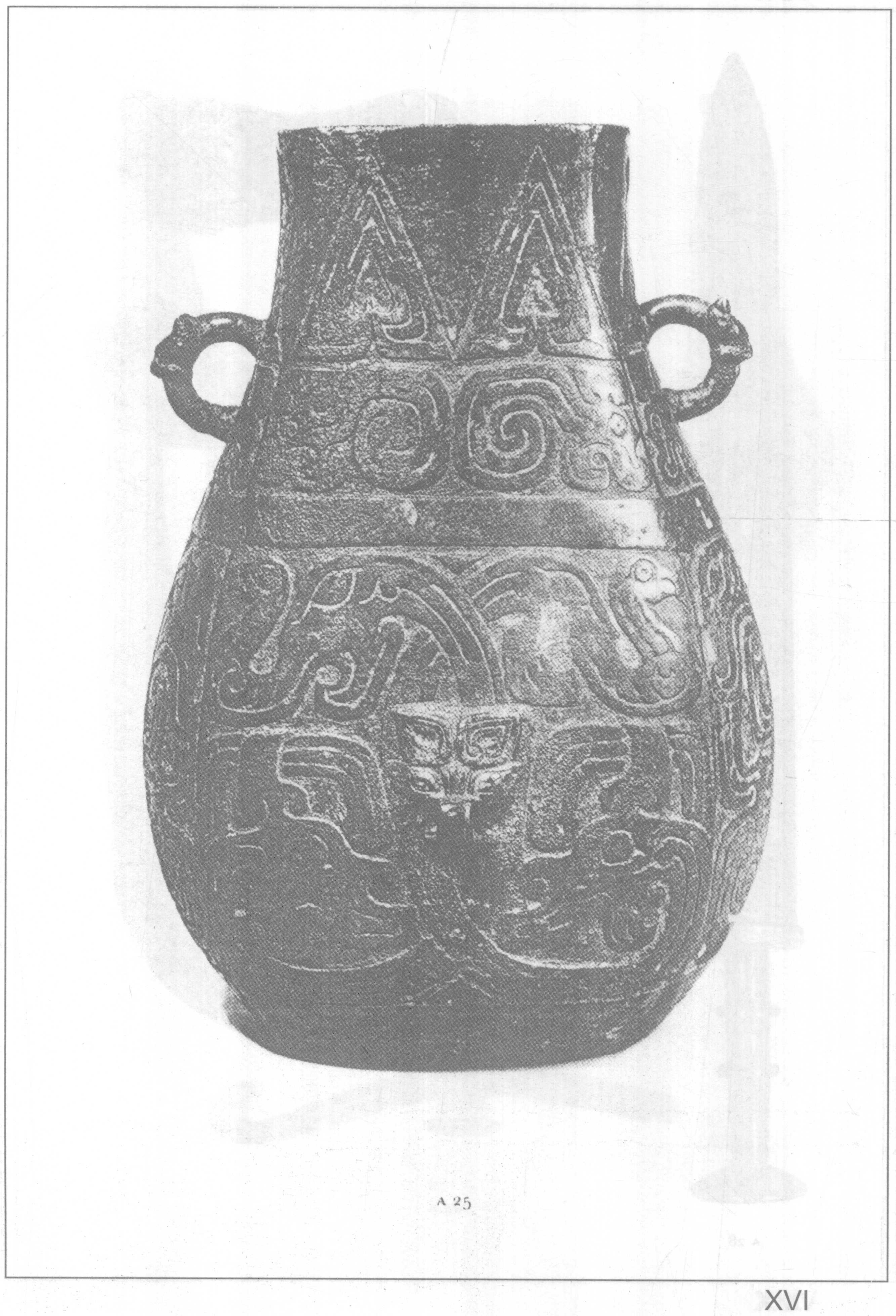
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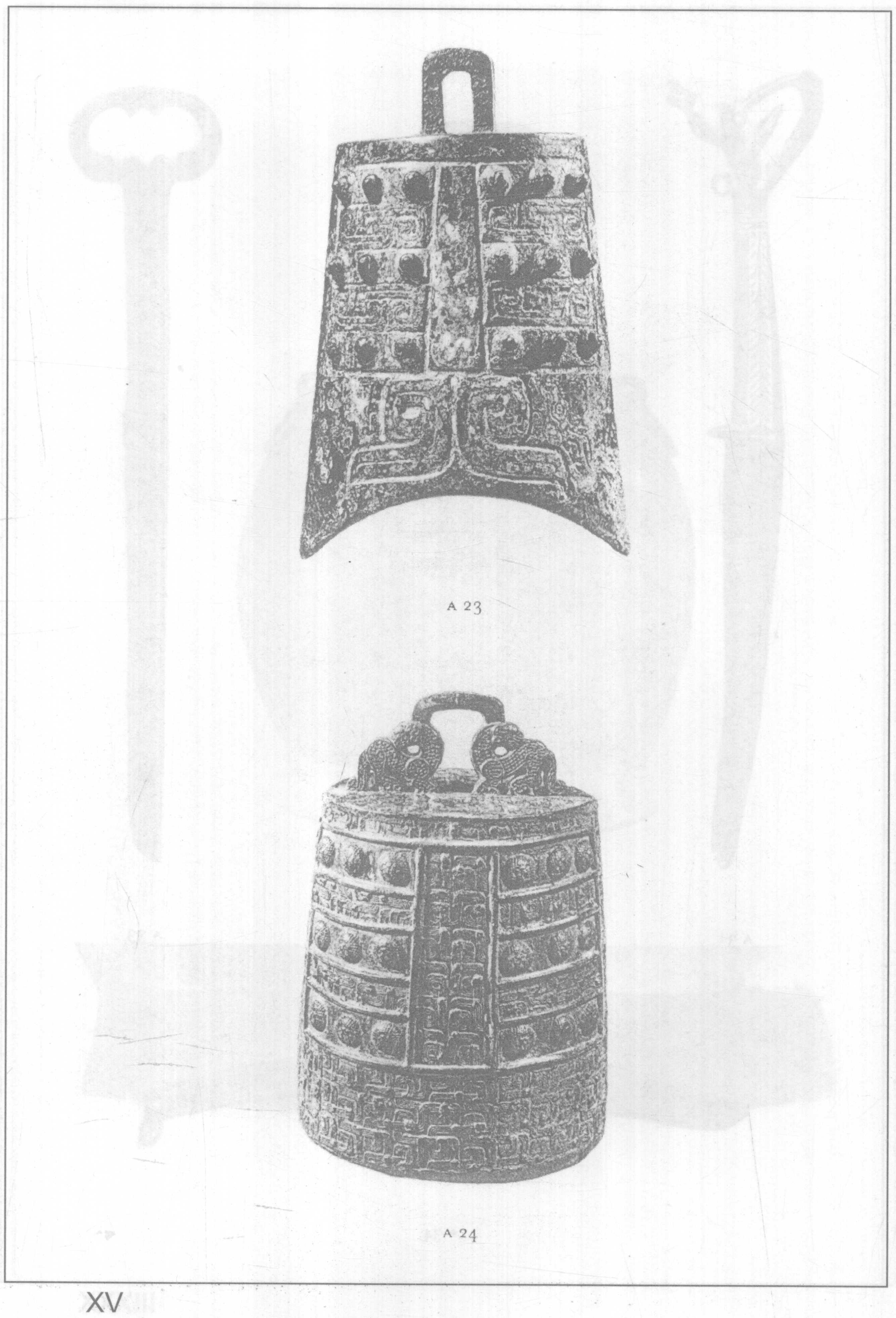
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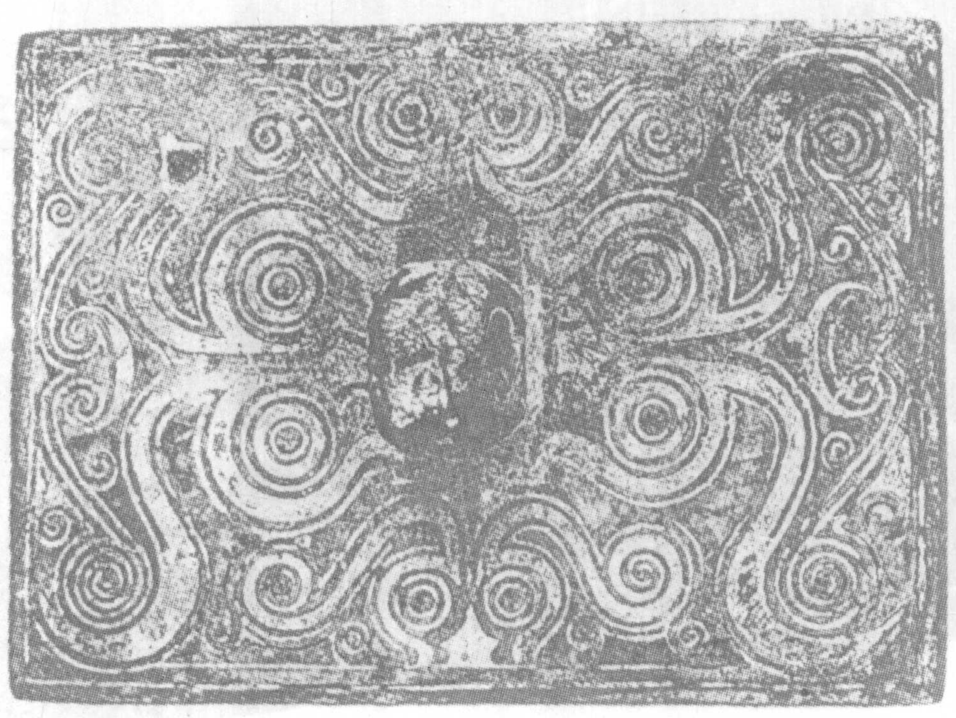
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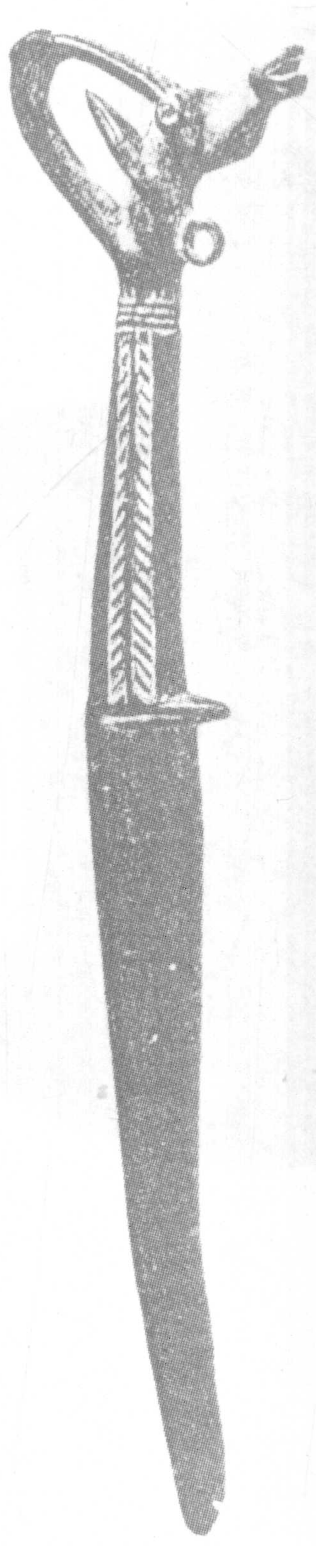
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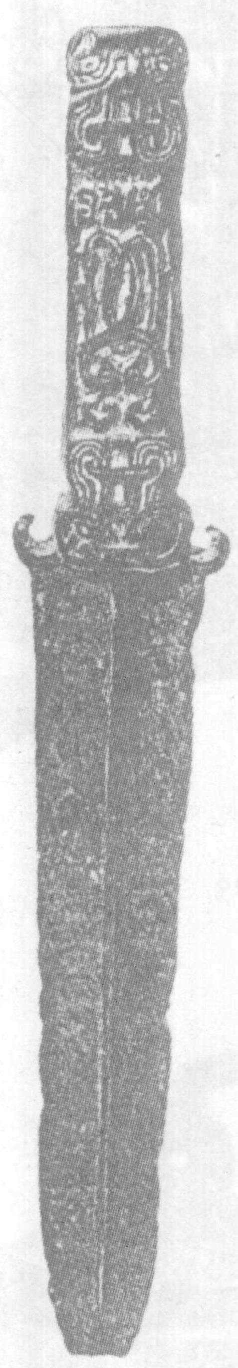
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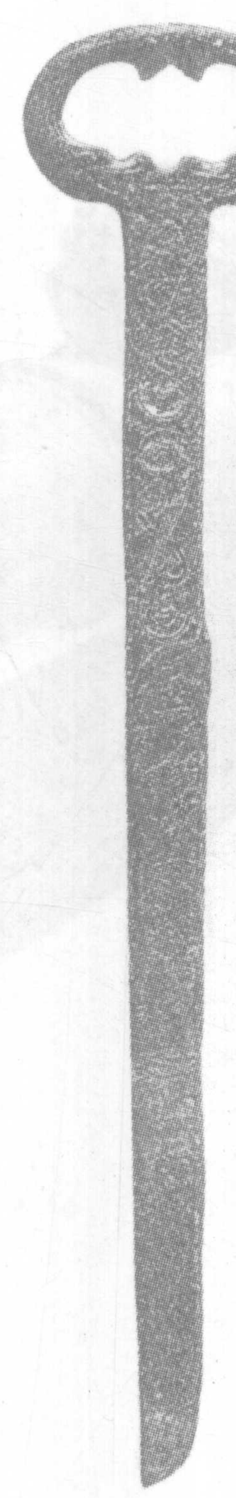
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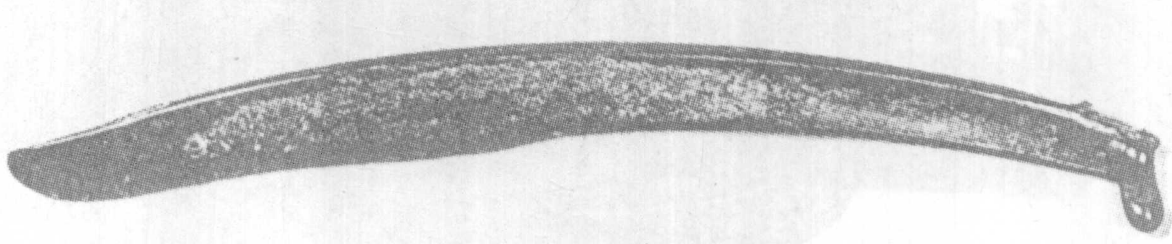
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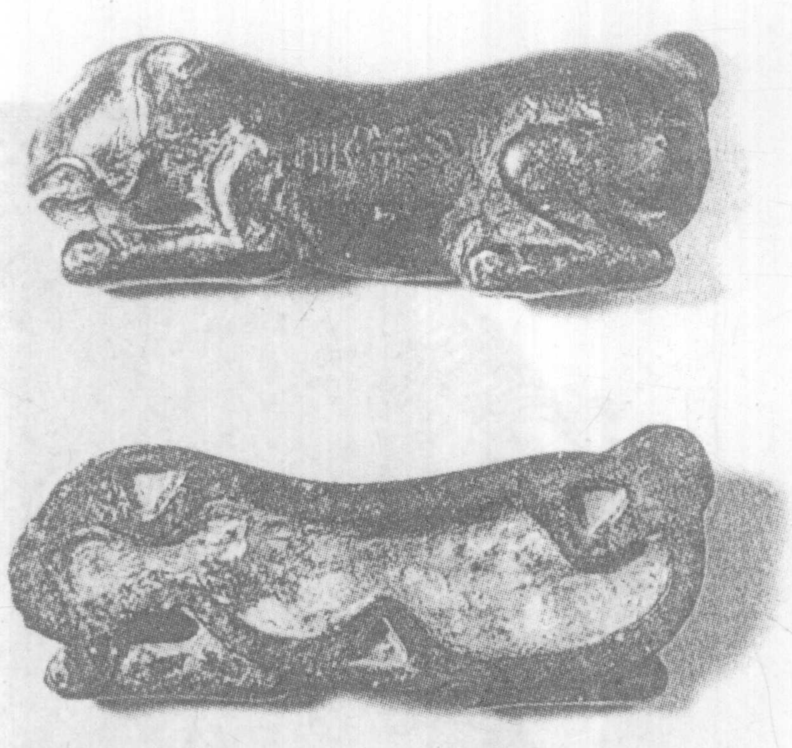

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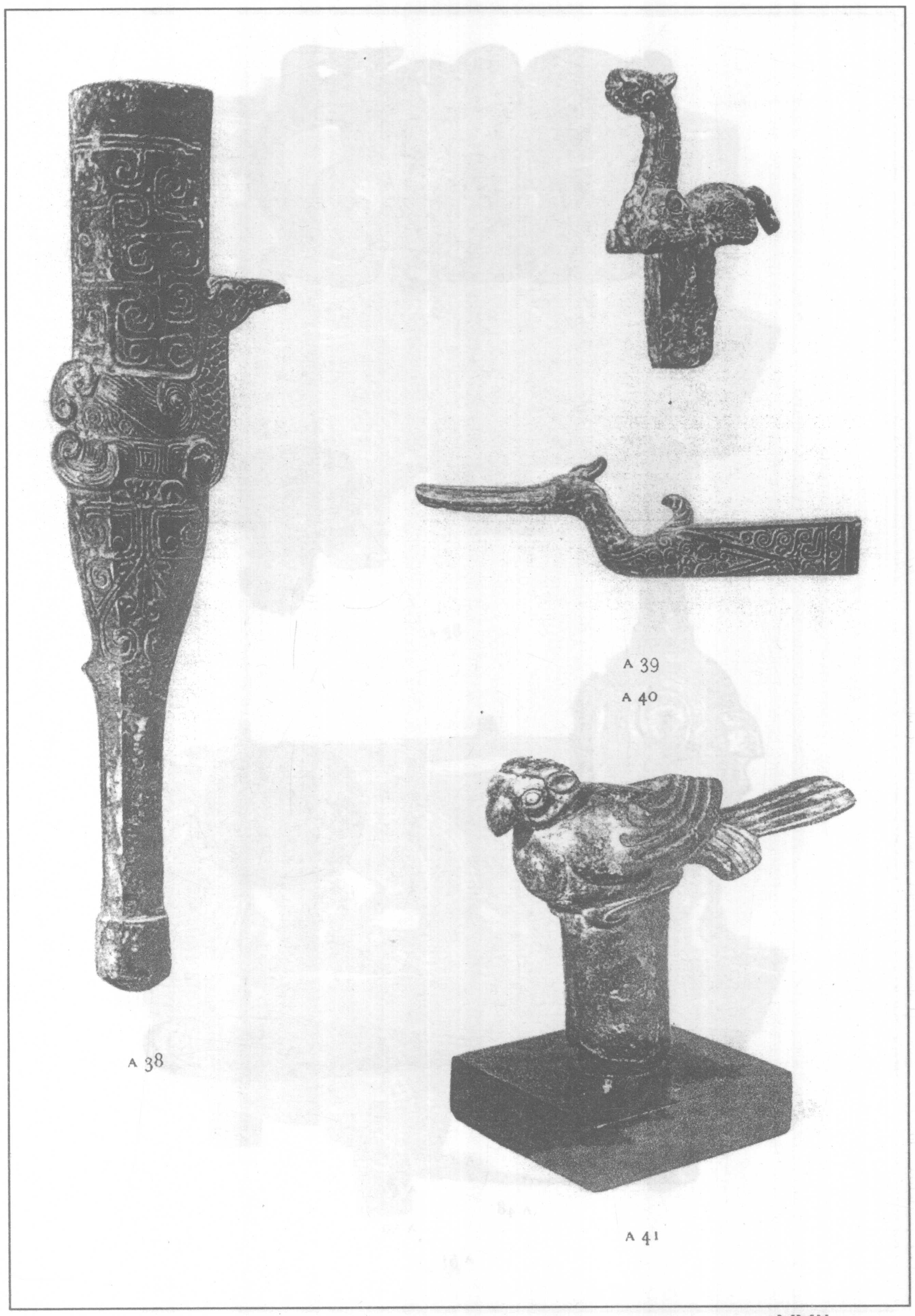
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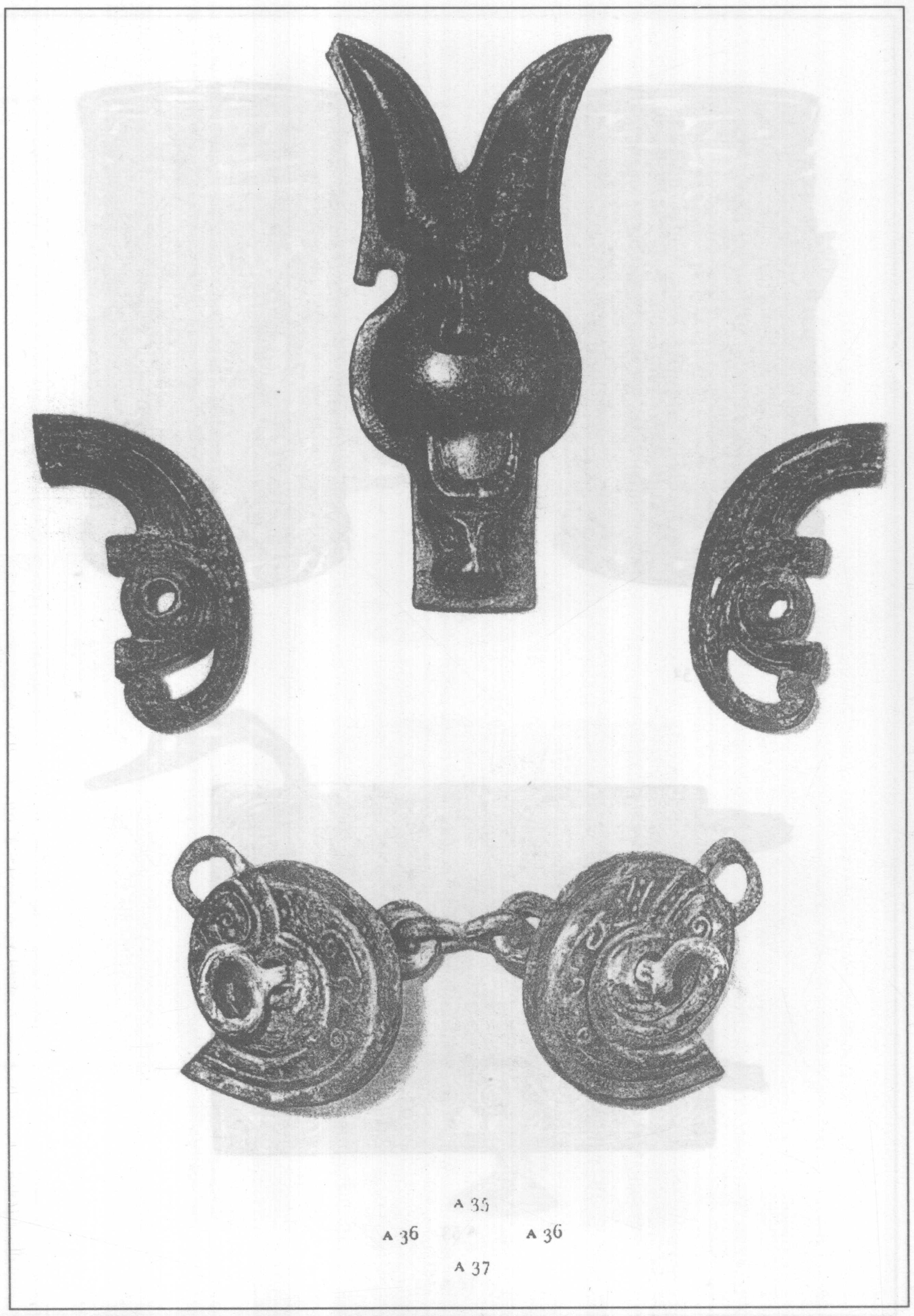

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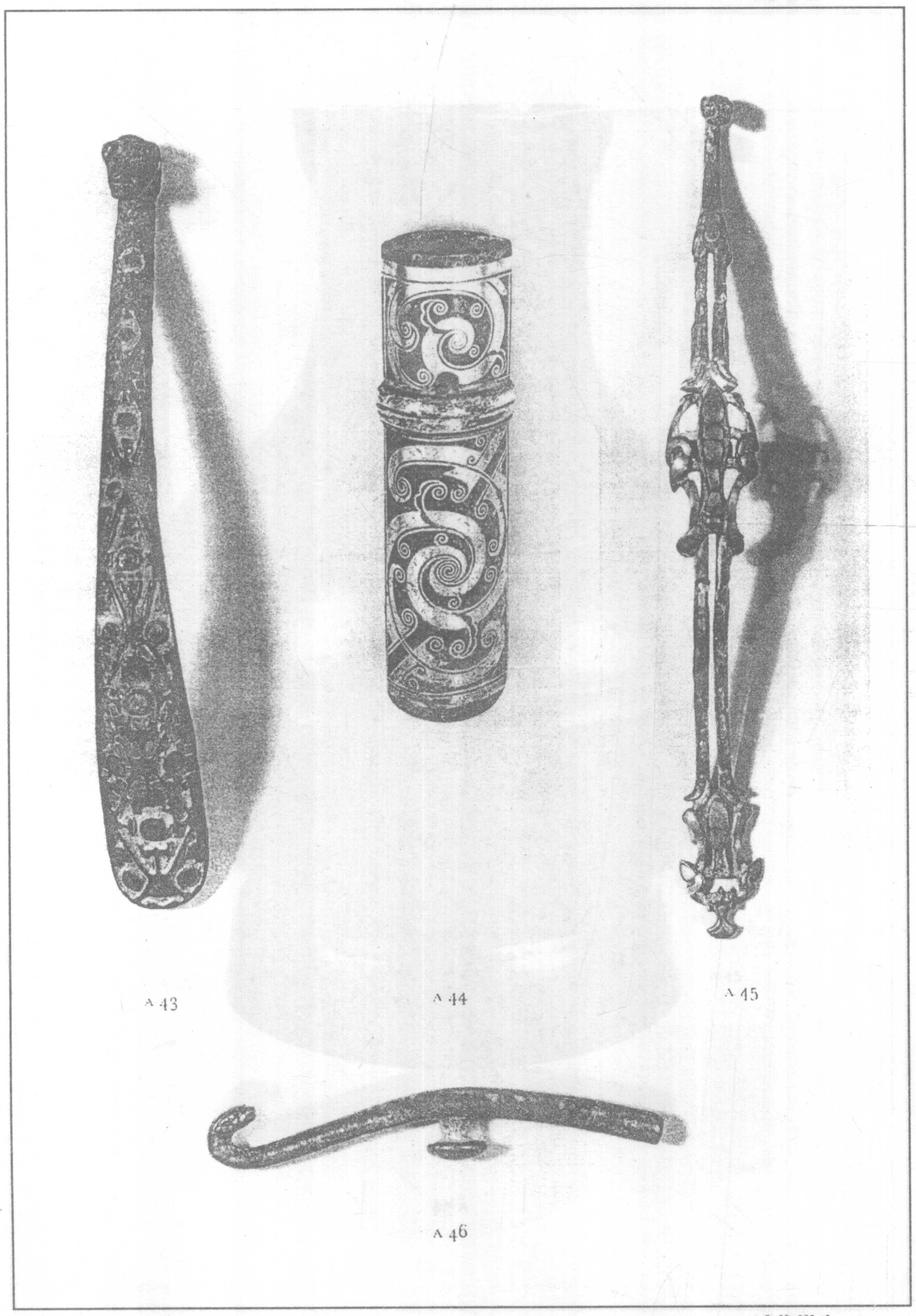
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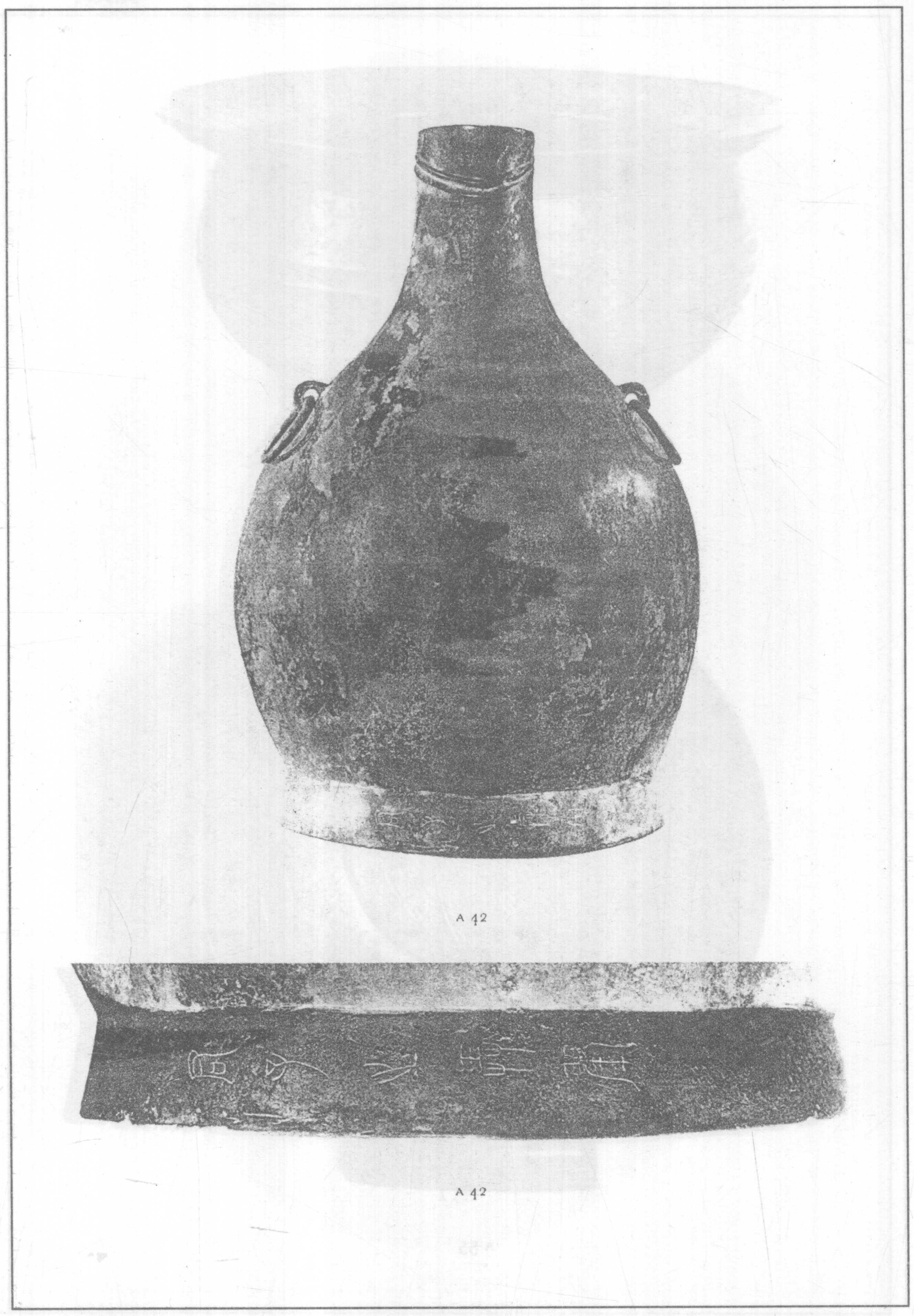
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XXI



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XXIV



A 42

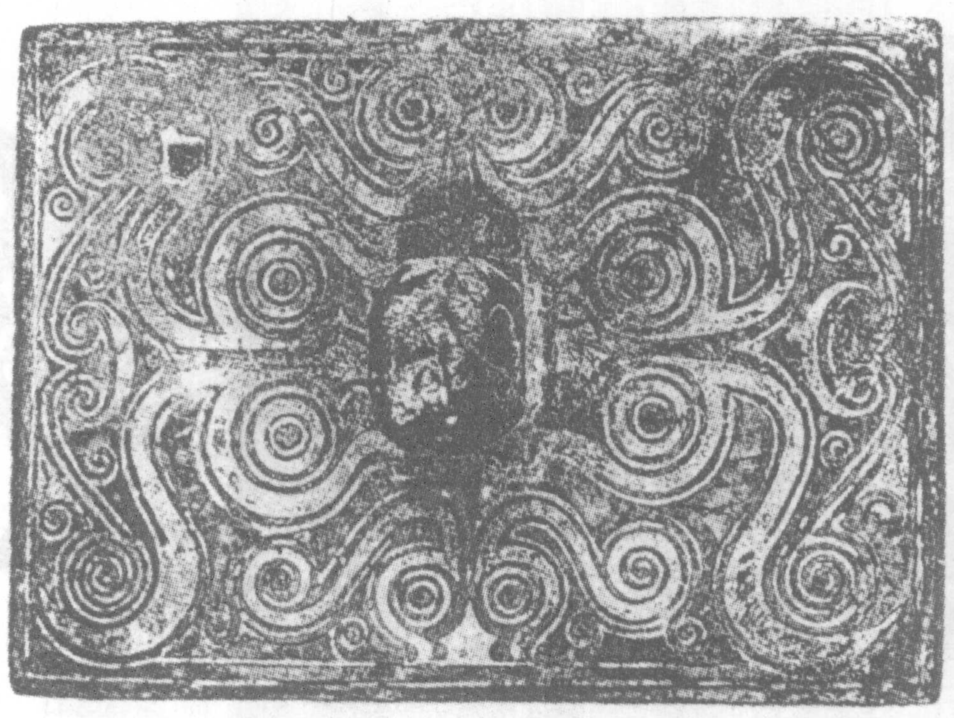
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XXIII





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A 53

XXVI



A 47
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A 51

XXV



A 55



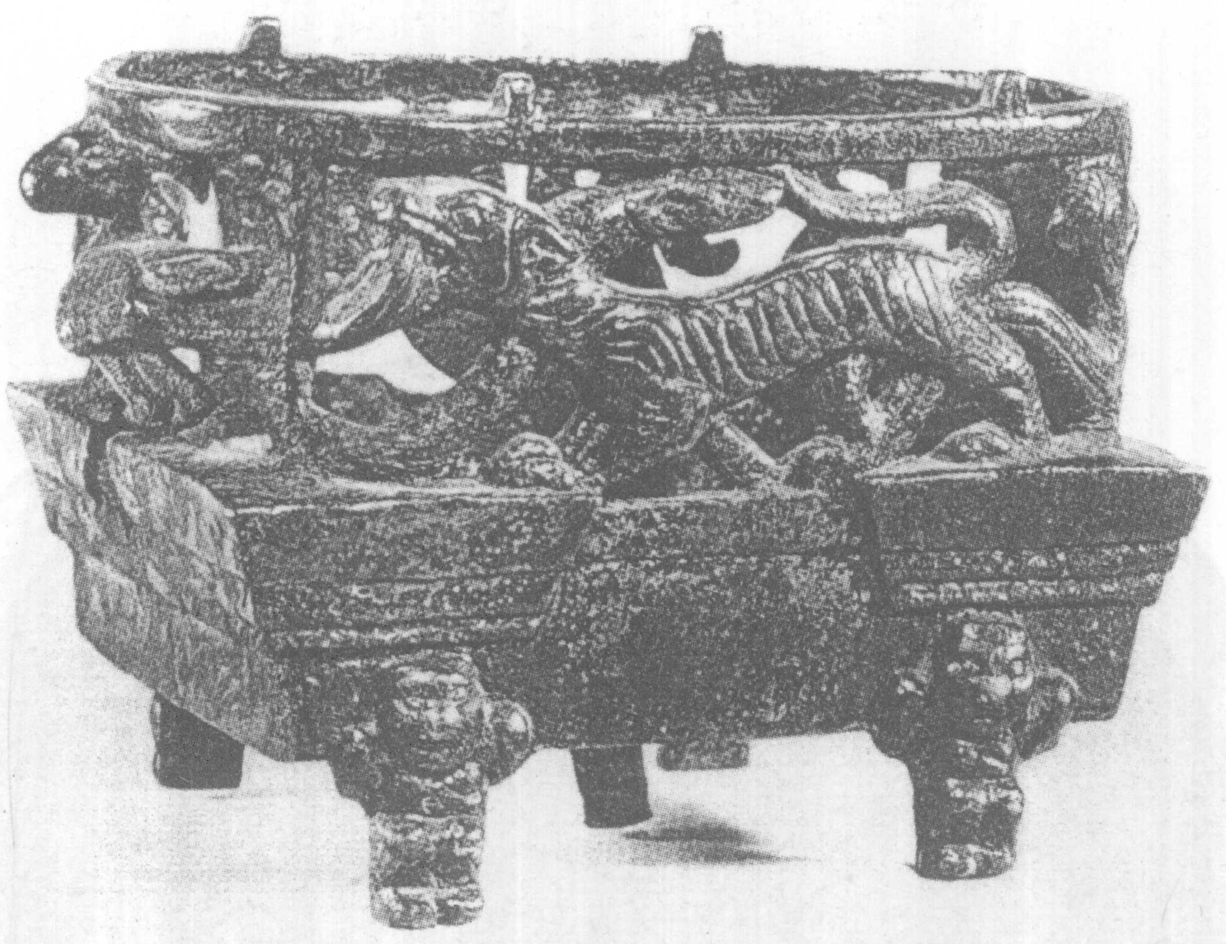
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XXVIII



A 54

XXVII

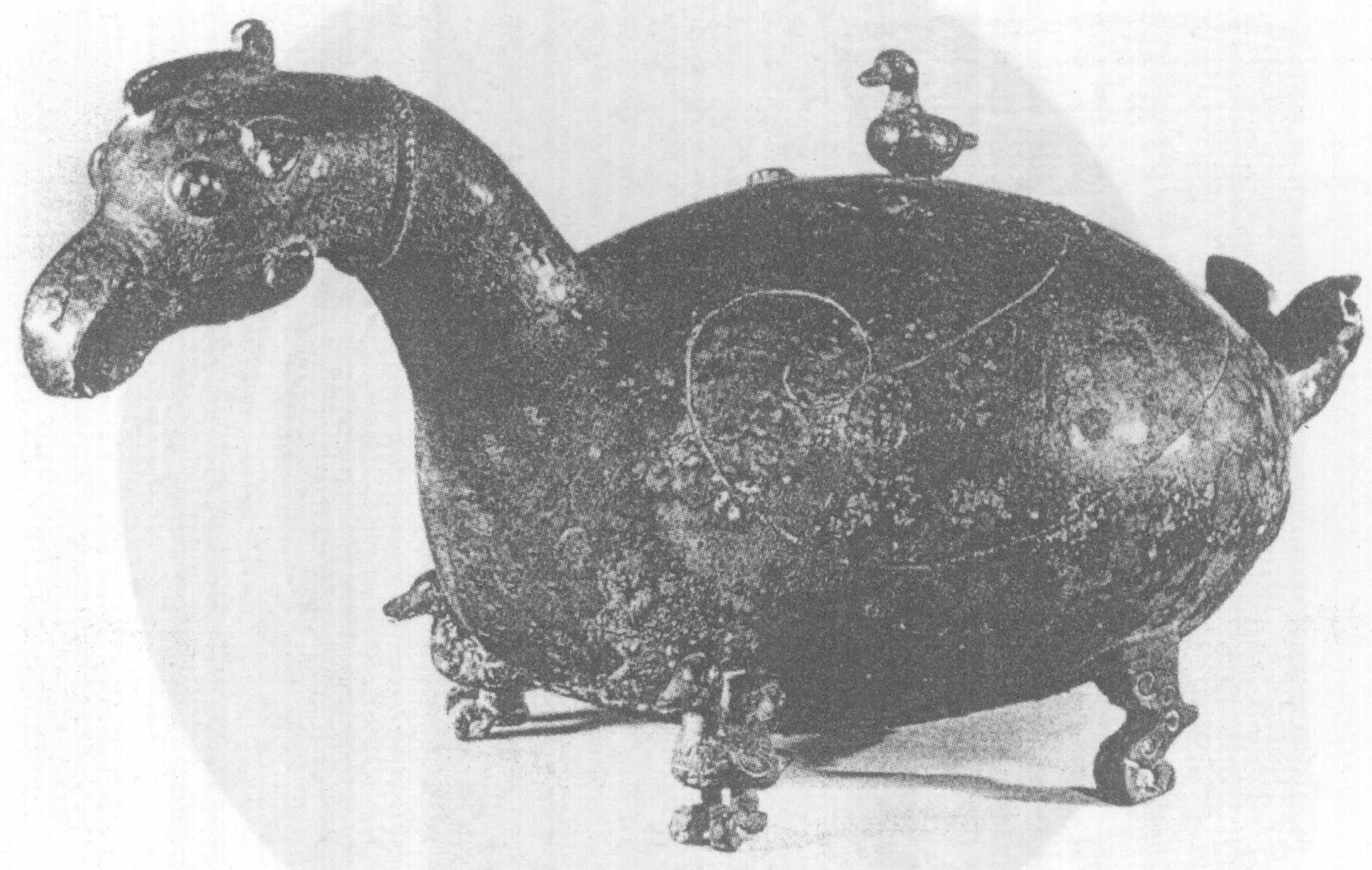


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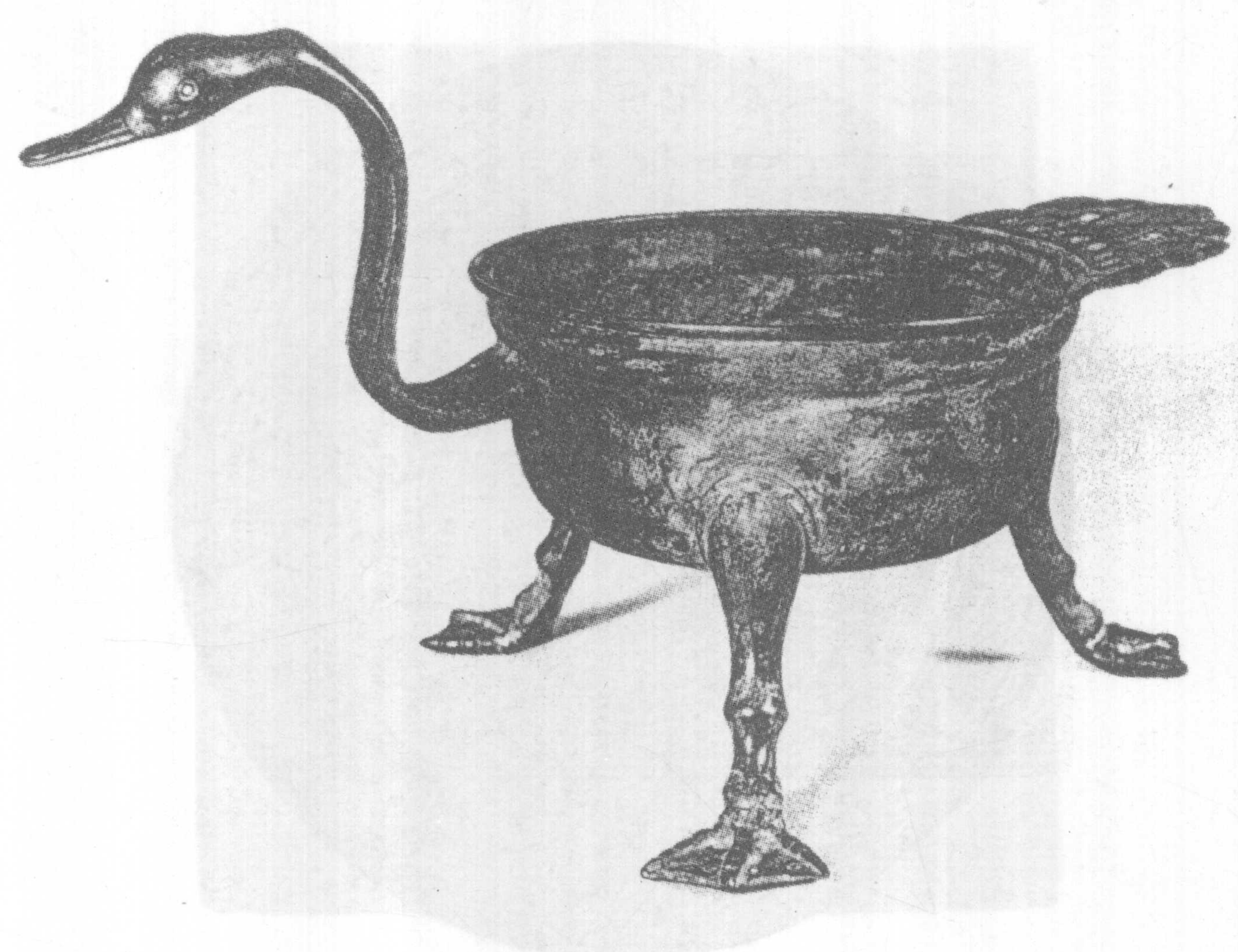


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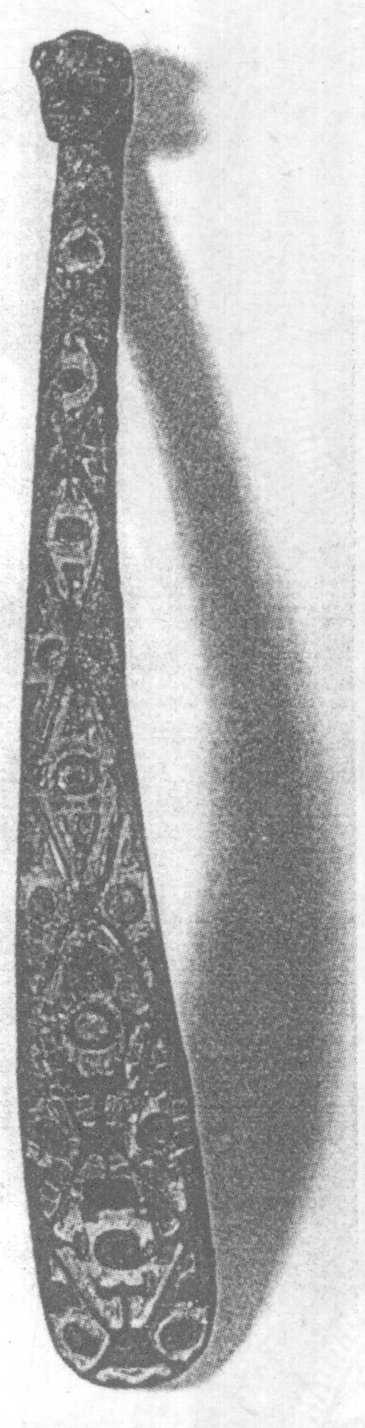


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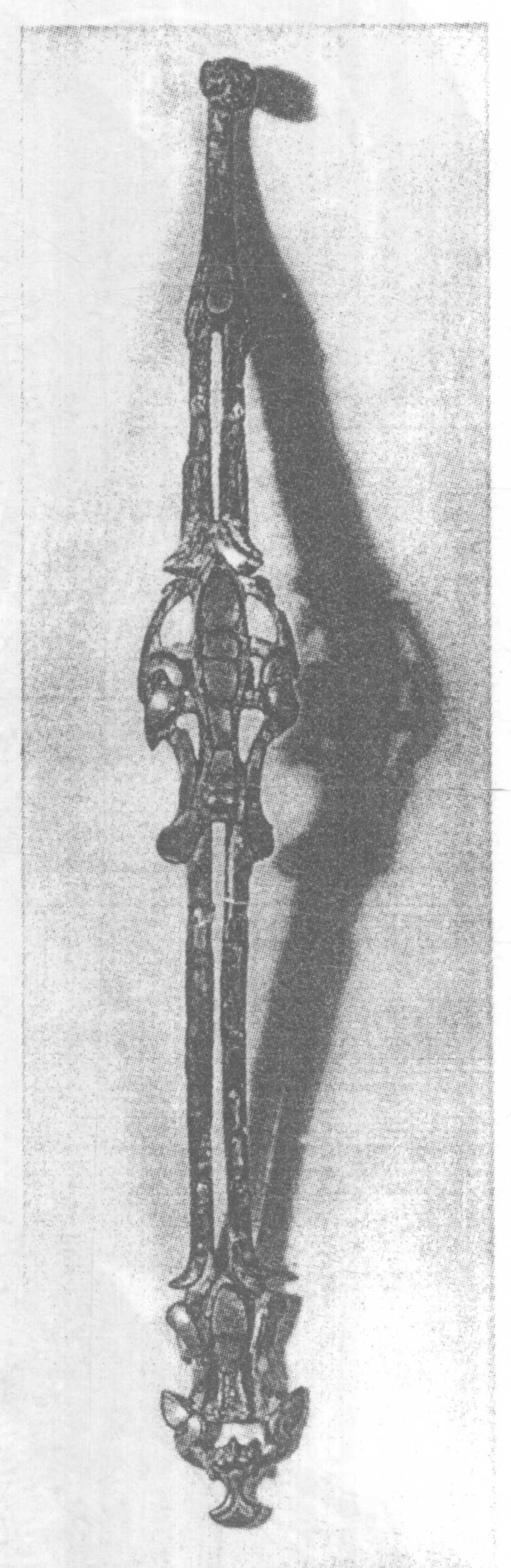
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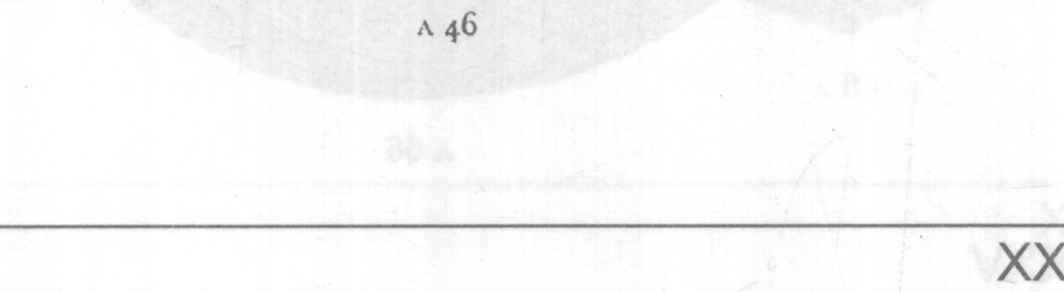
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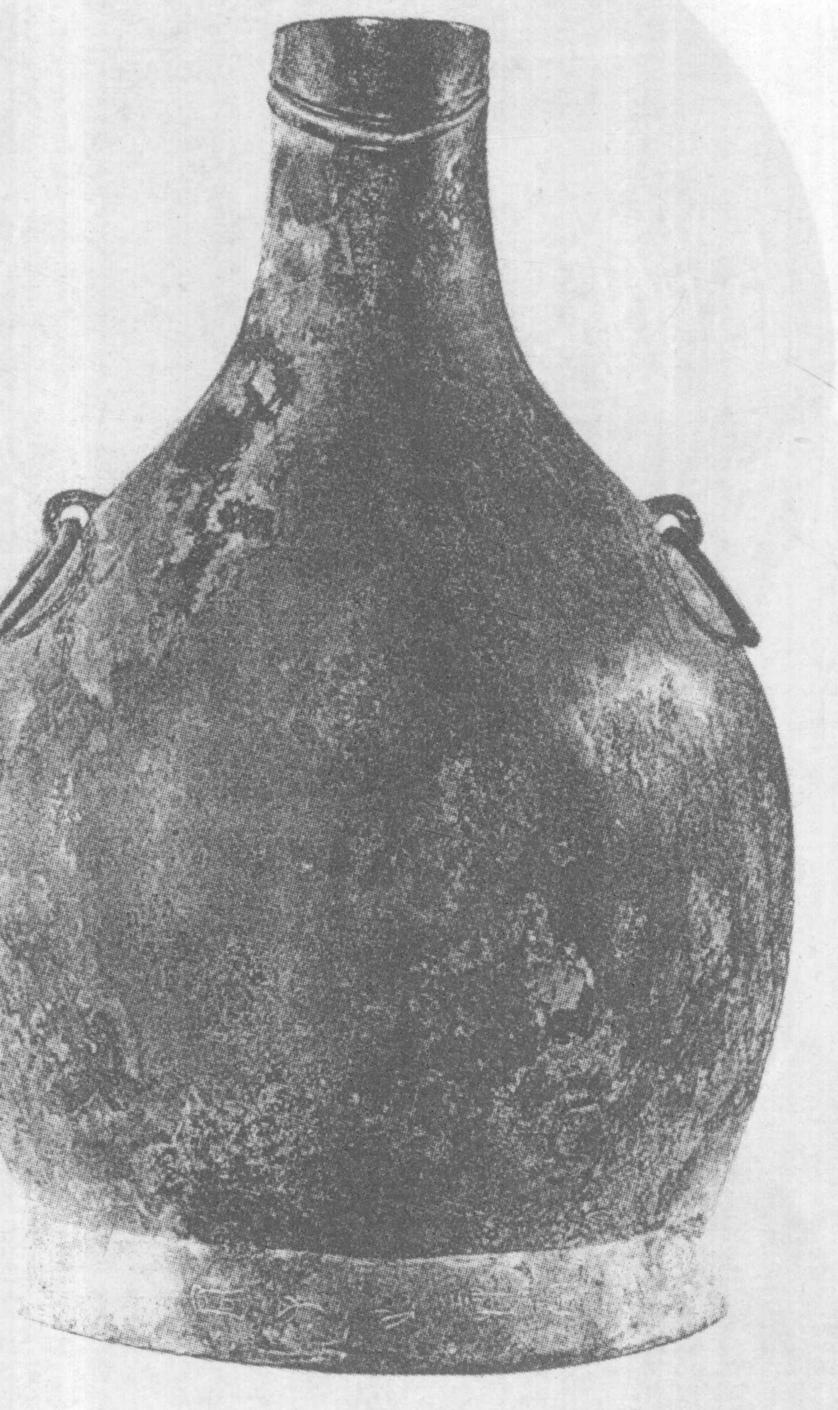


A 45



A 46

XXIV



A 42



A 42

XXIII



A 63



A 64

XXXIV



A 62

XXXIII



A 67



A 68

XXXVI



A 65



A 66

XXXV



A 71

XXXVIII



A 69

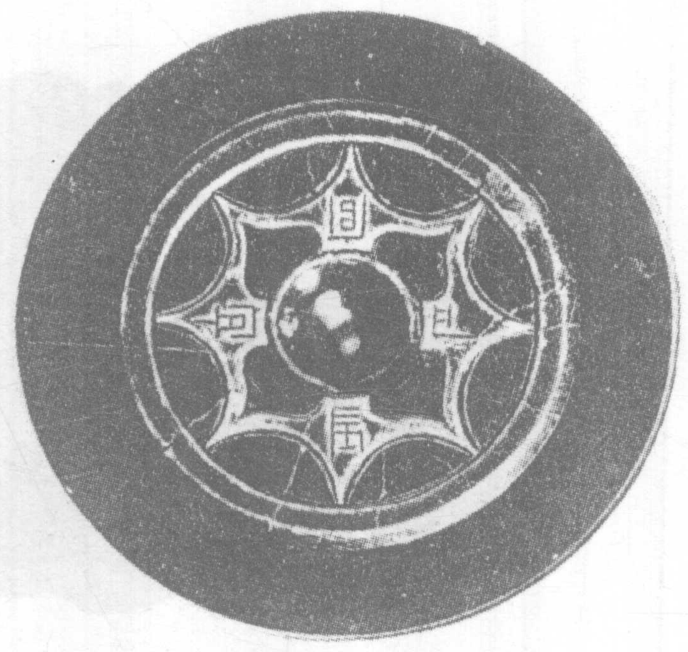


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XXXVII



A 73



A 74



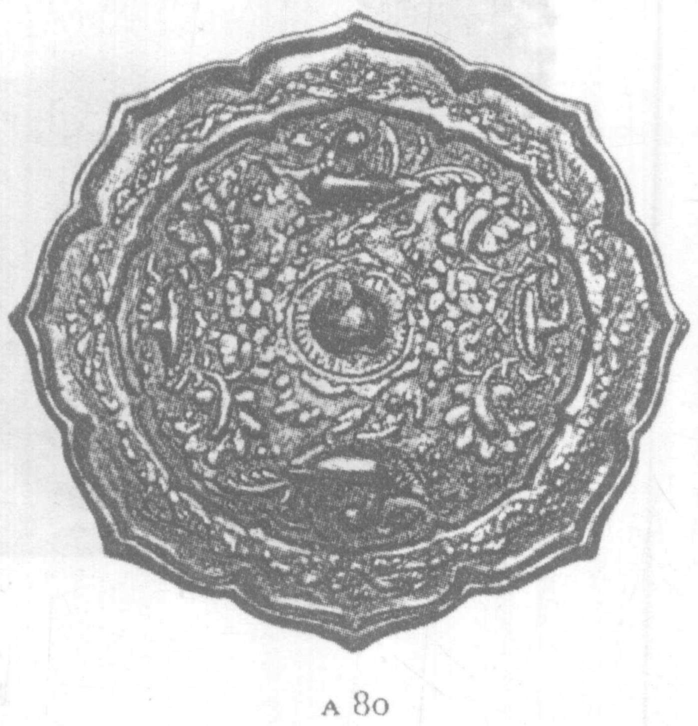
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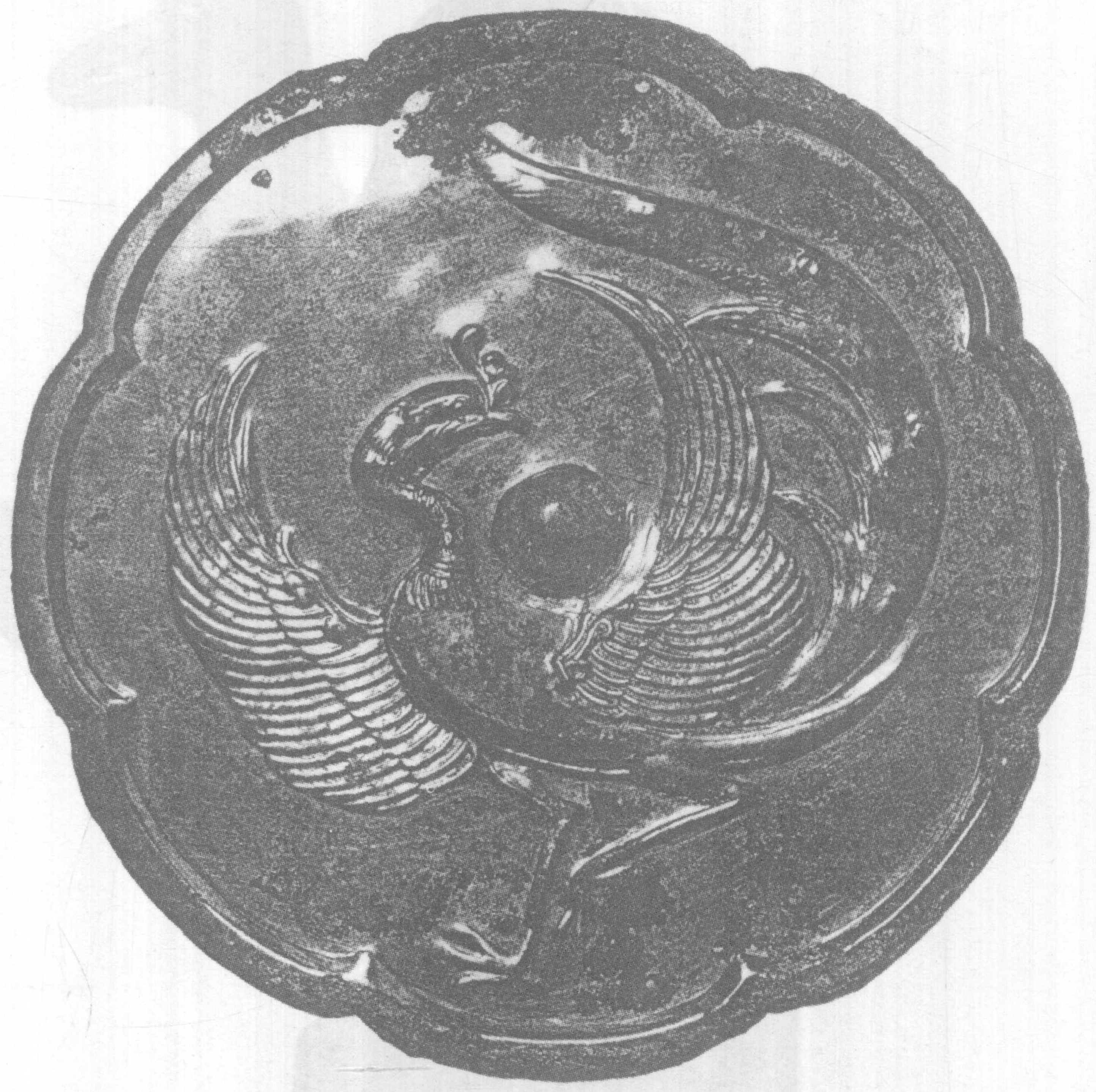


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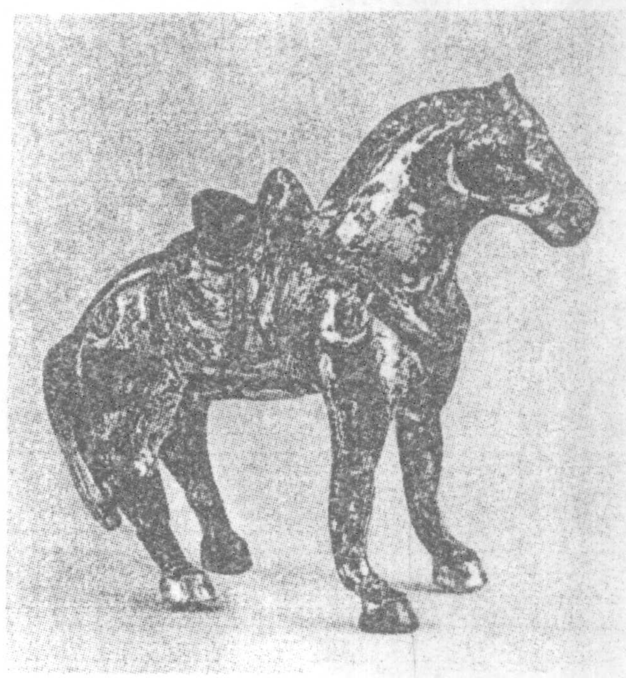
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XL



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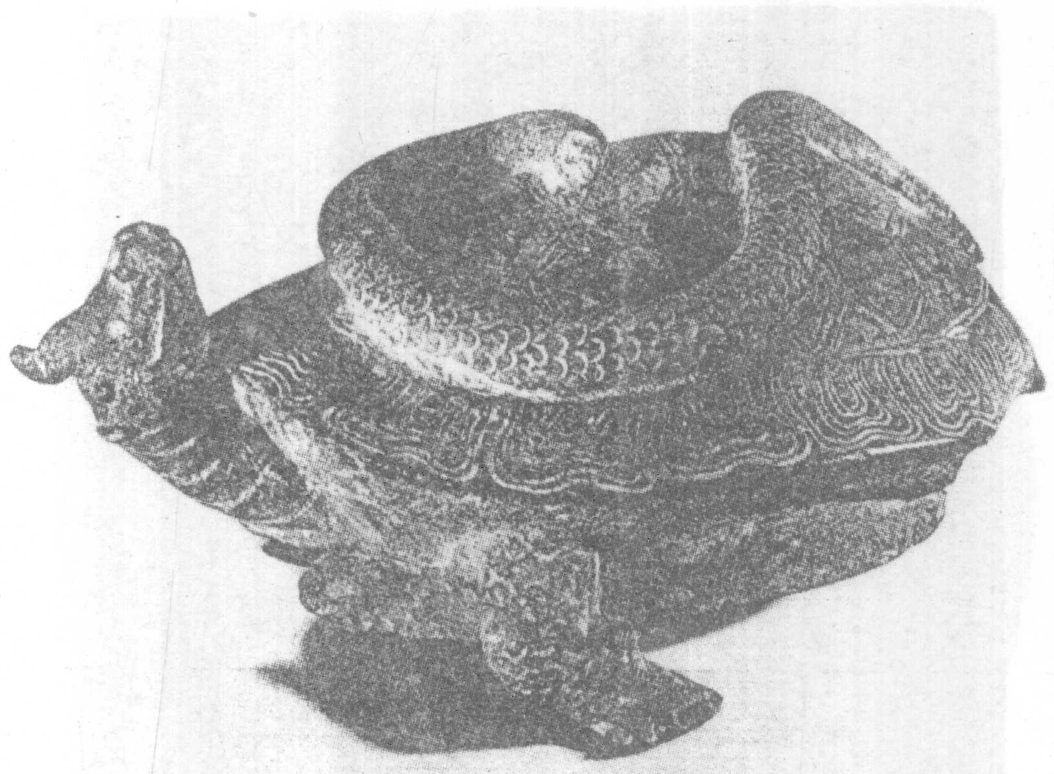
XXXIX



A 83



A 84



A 85

XLII



A 82

XLI



A 91

XLIV



A 86



A 87



A 88

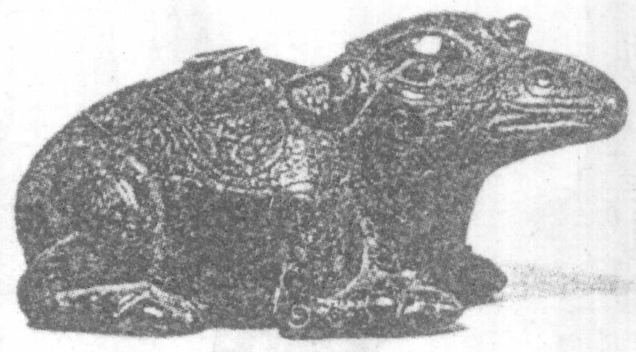


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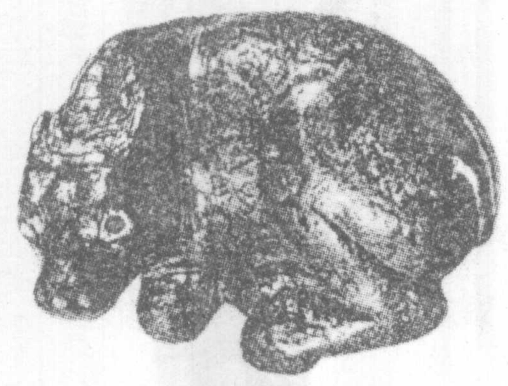


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XLIII



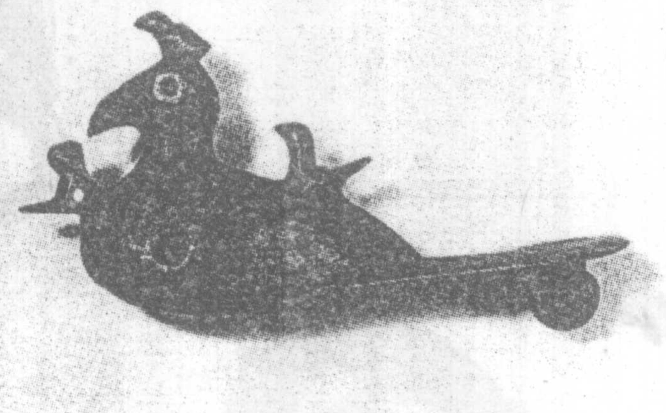
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A 96



A 97



A 98

XLVI

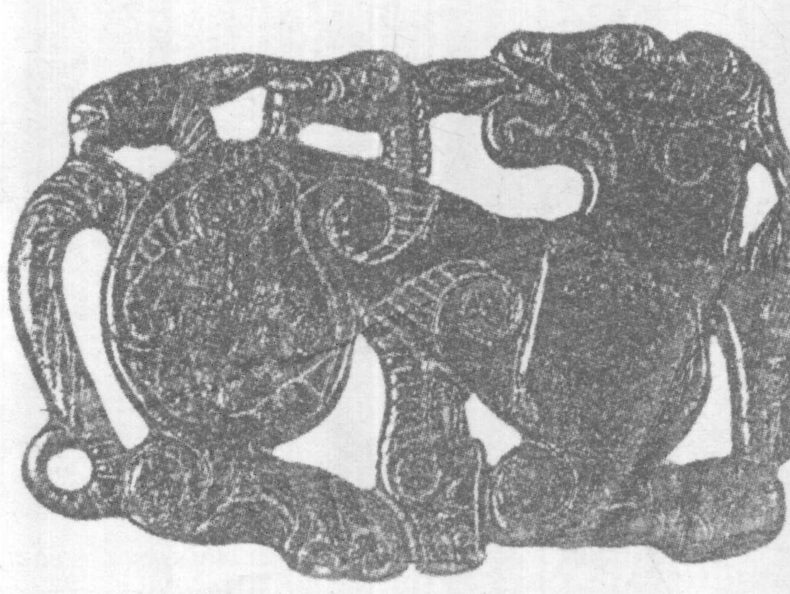


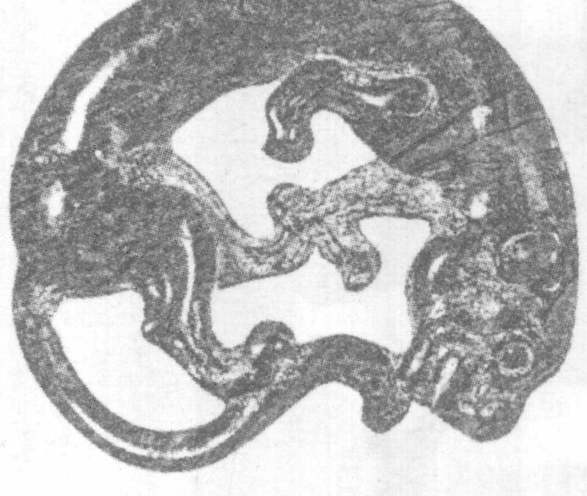
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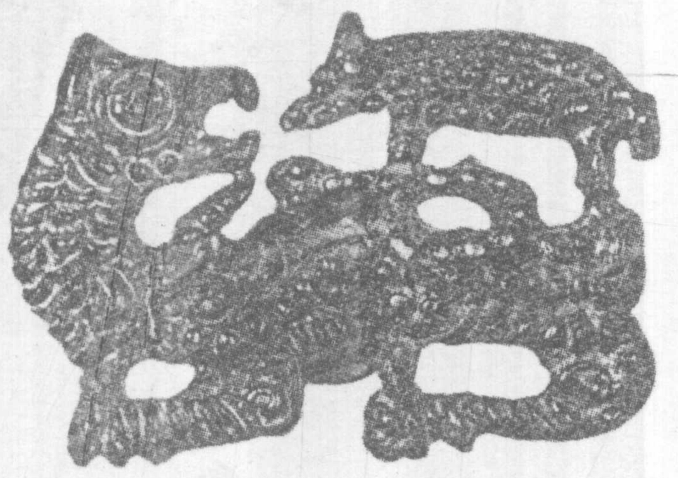


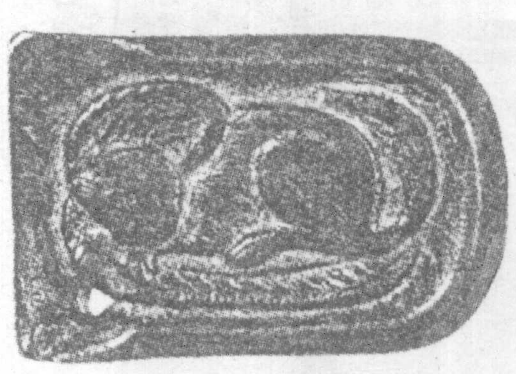
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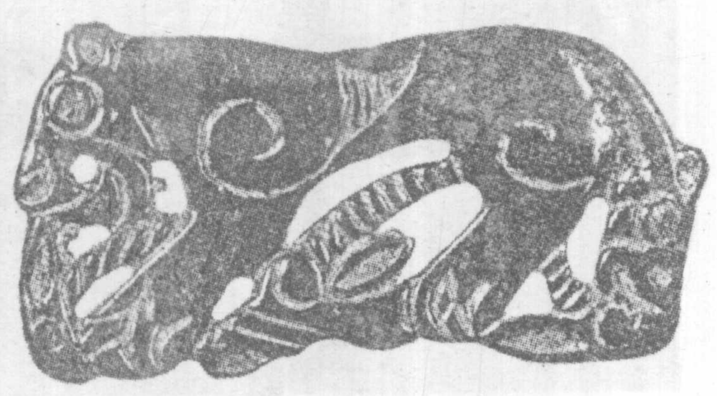
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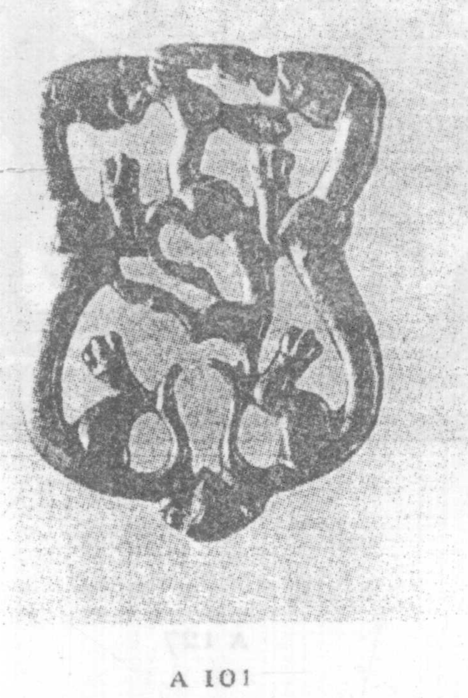
A 103 A 104

A 105 A 106

XLVIII

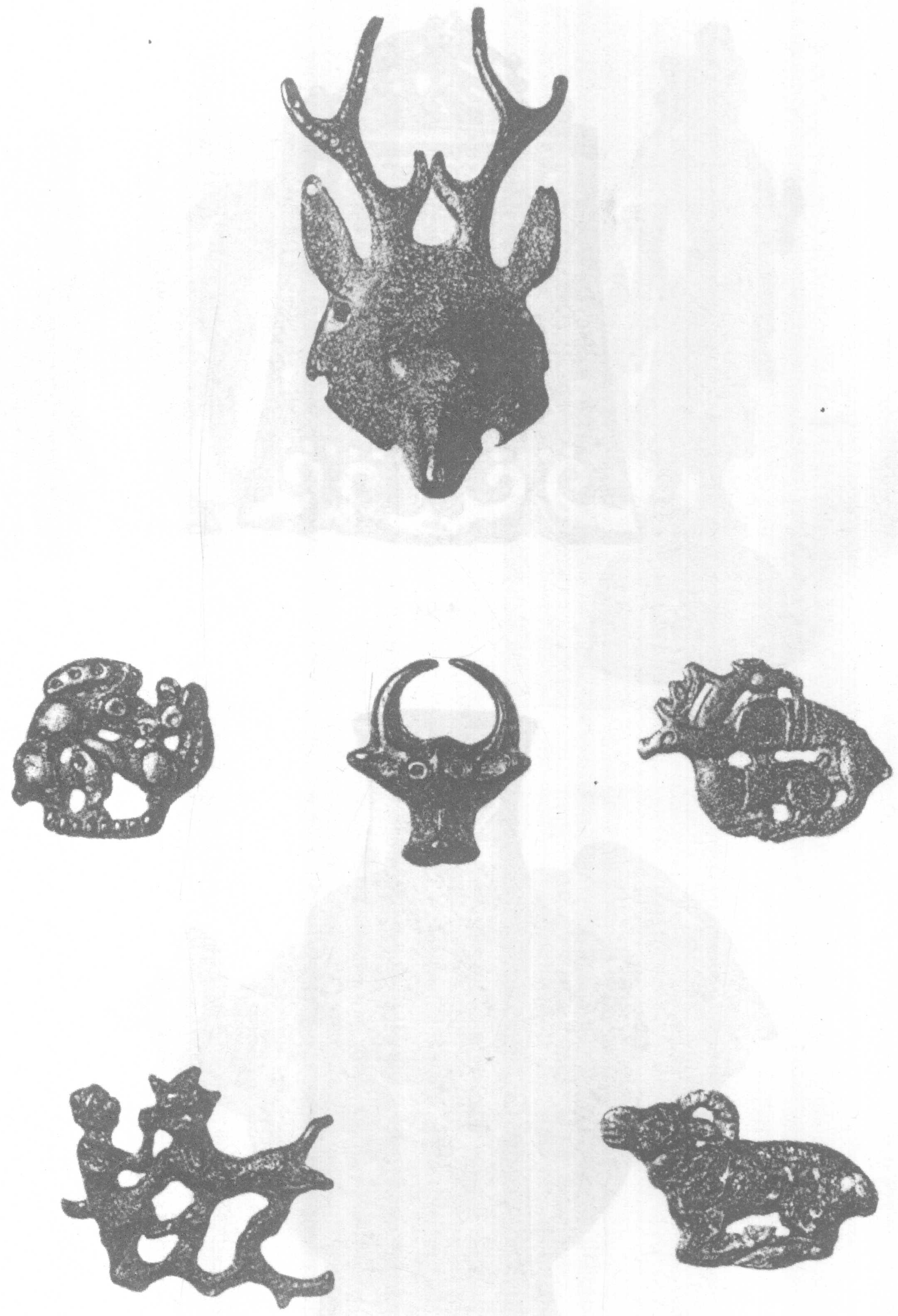


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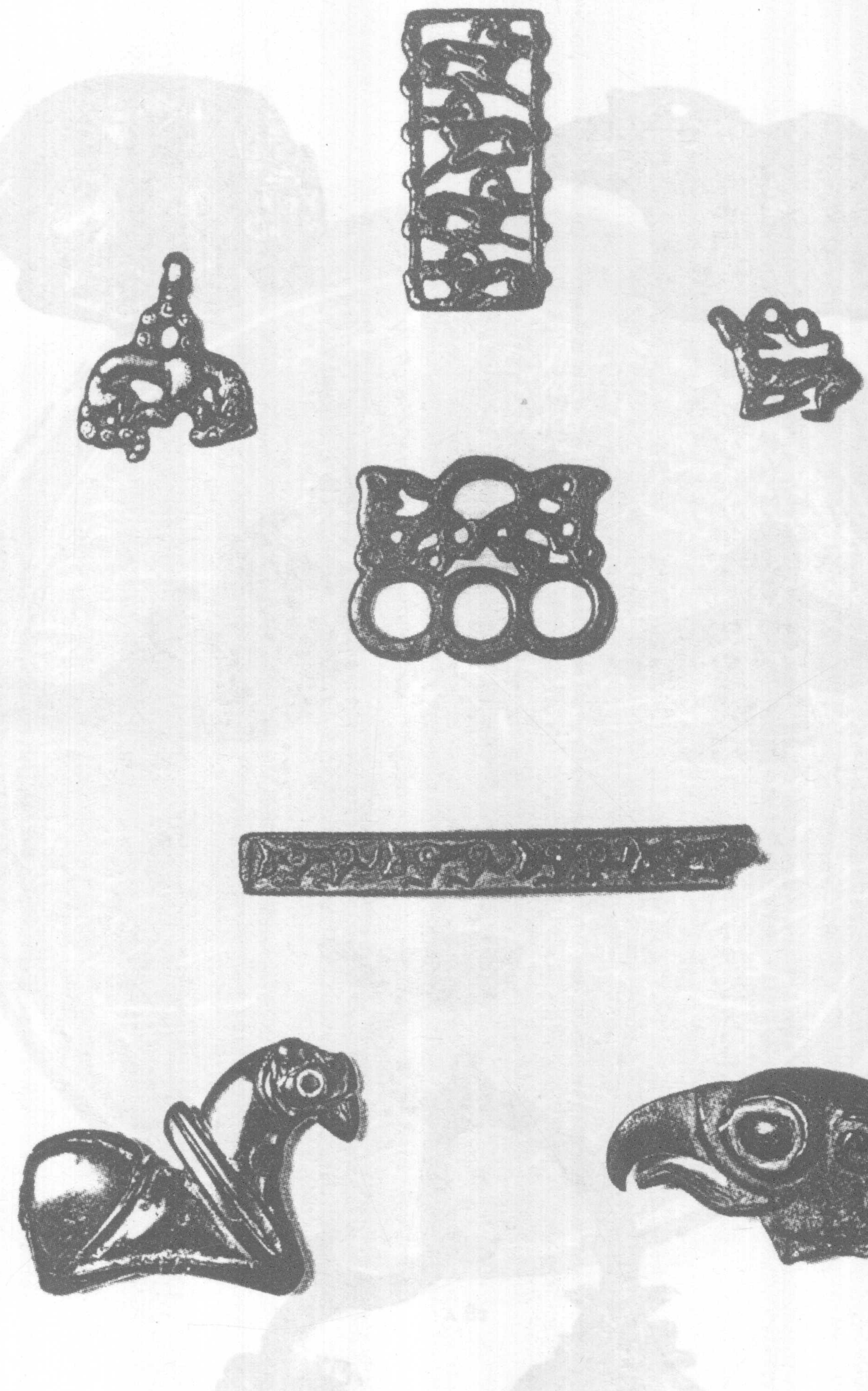
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XLVII



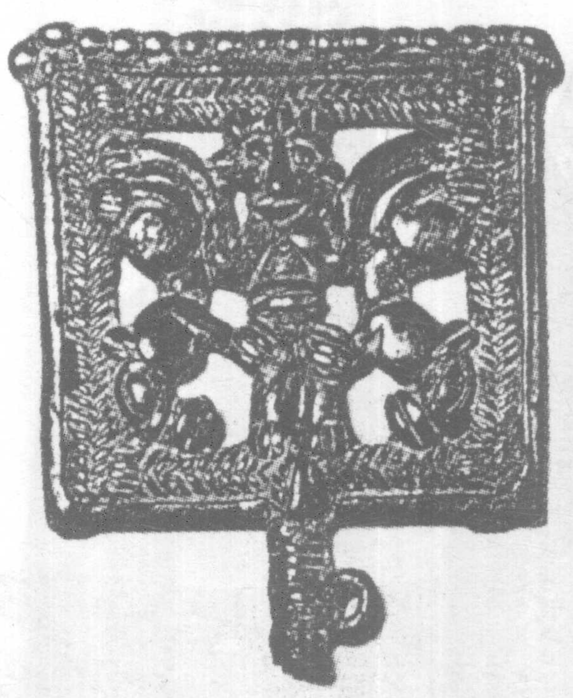
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A 118 A 119

L

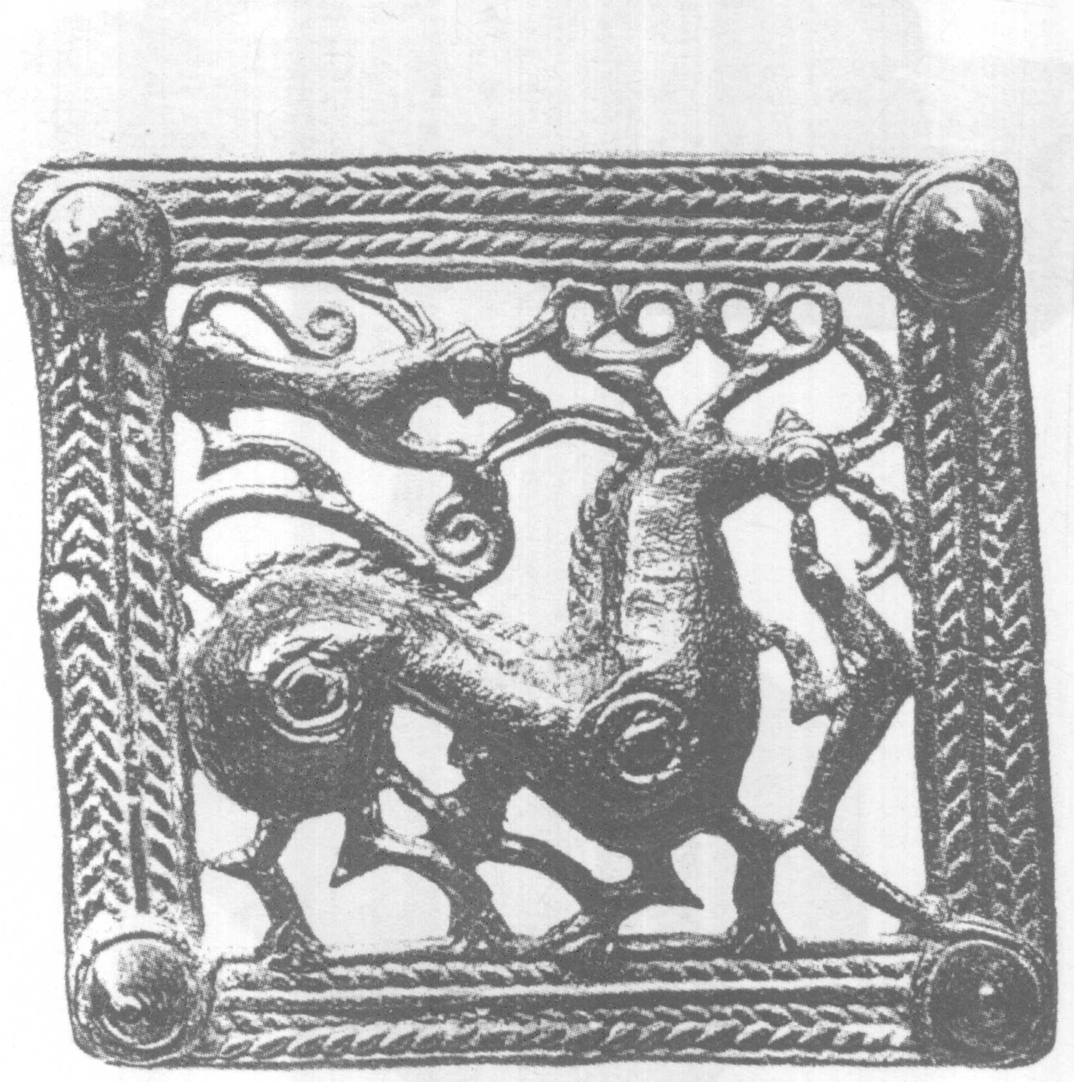


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A 112 A 113

XLIX

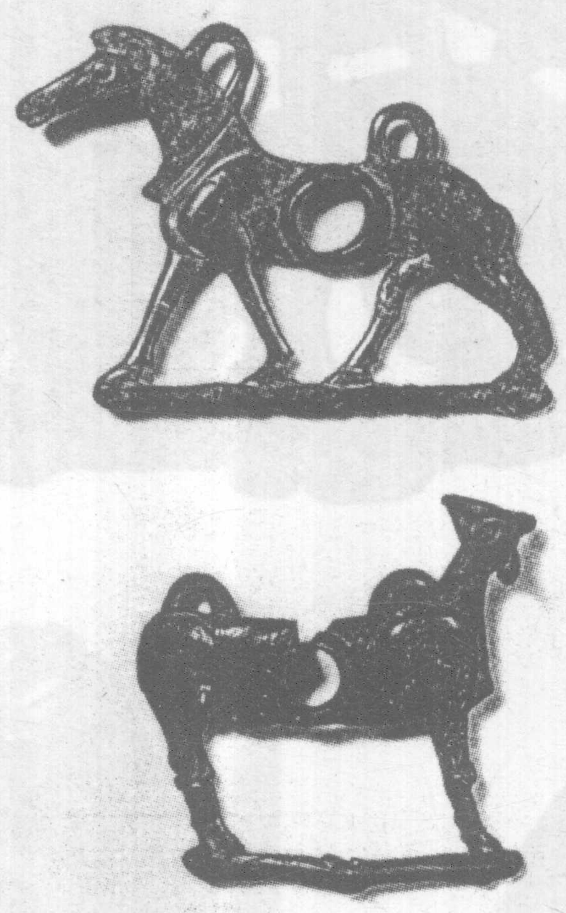


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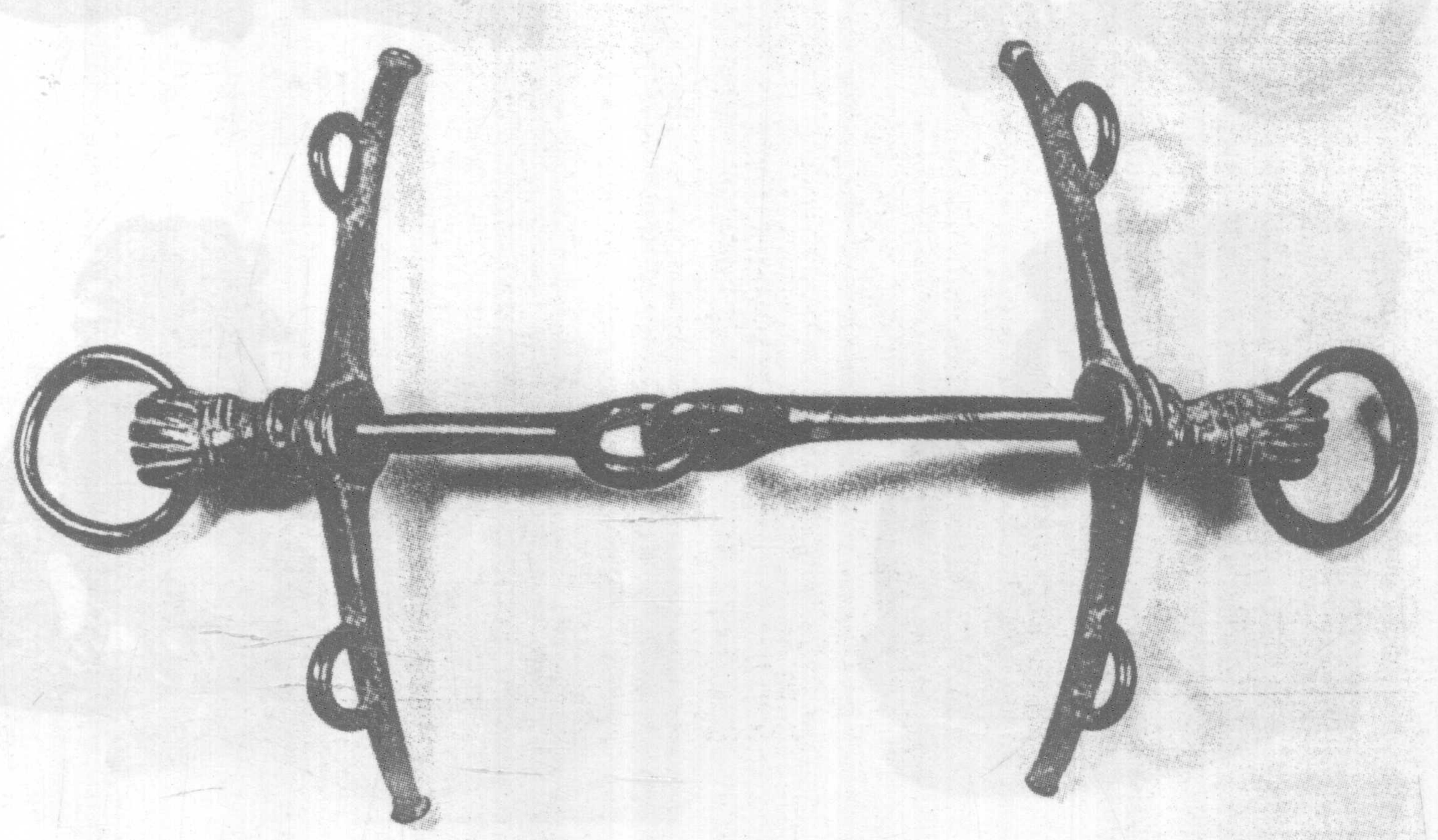


A 127

LII



A 121
A 123



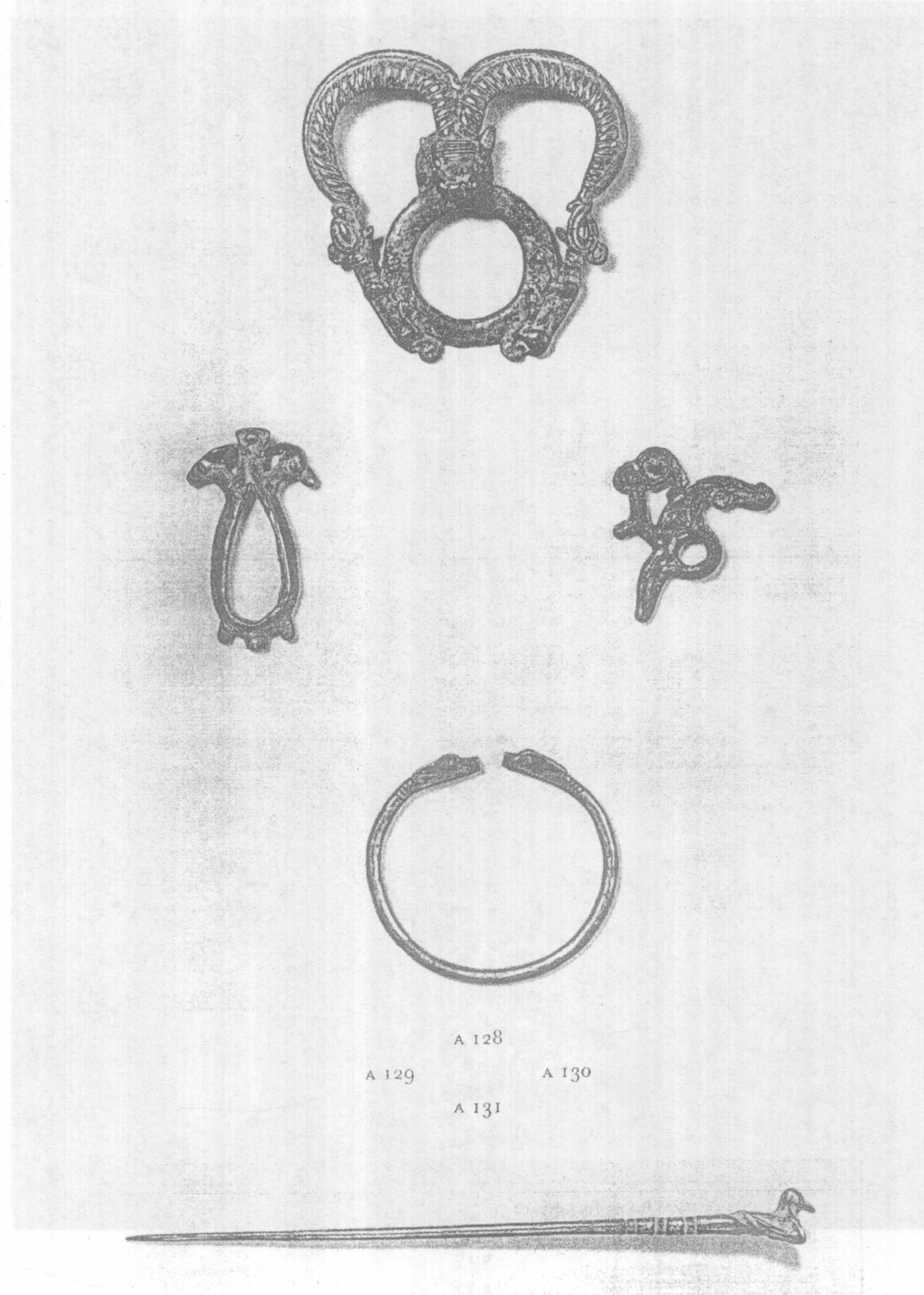
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LI



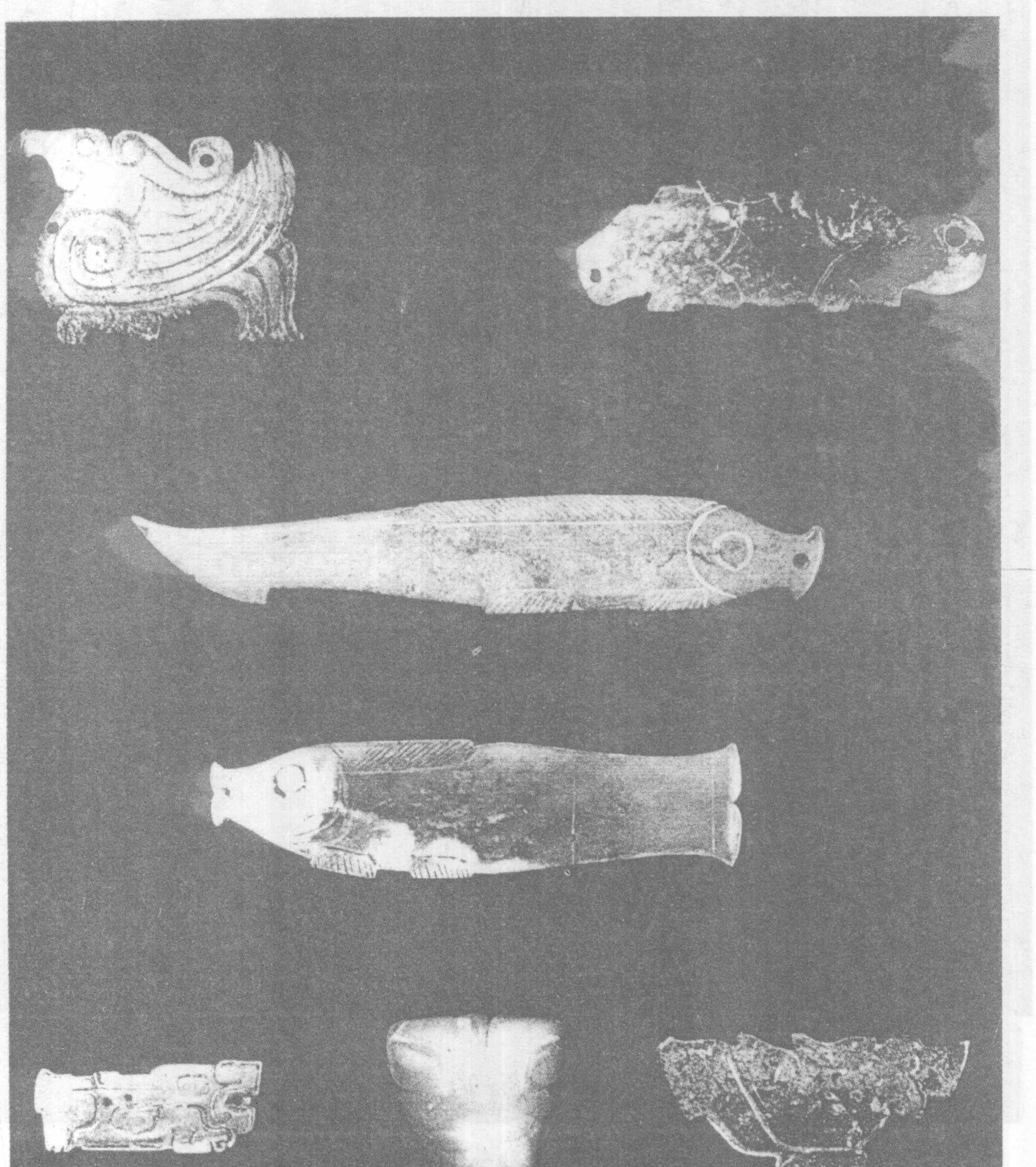
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LIV



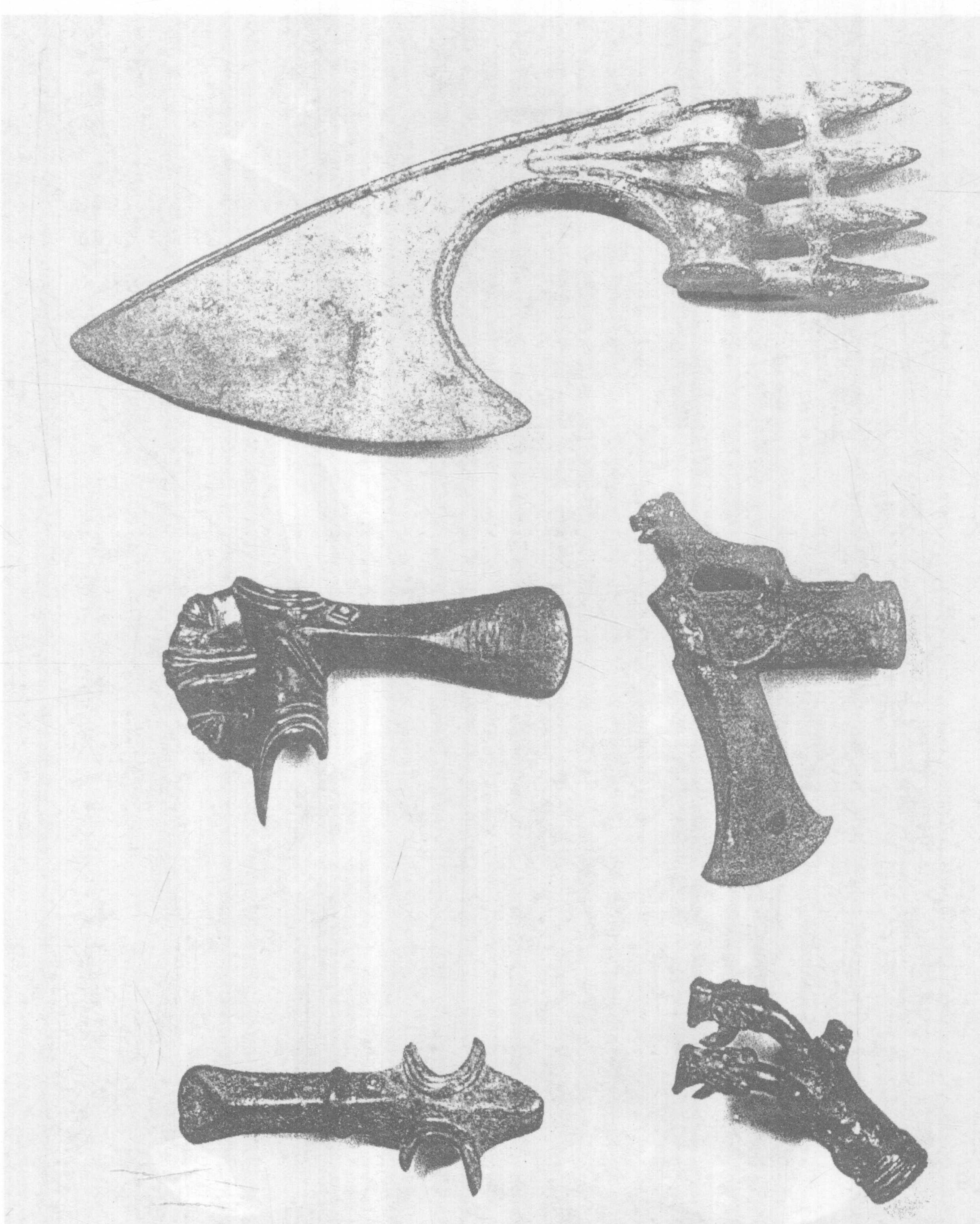
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LIII



B 1 B 2 B 3 B 4 B 5 B 6 B 7

LVI

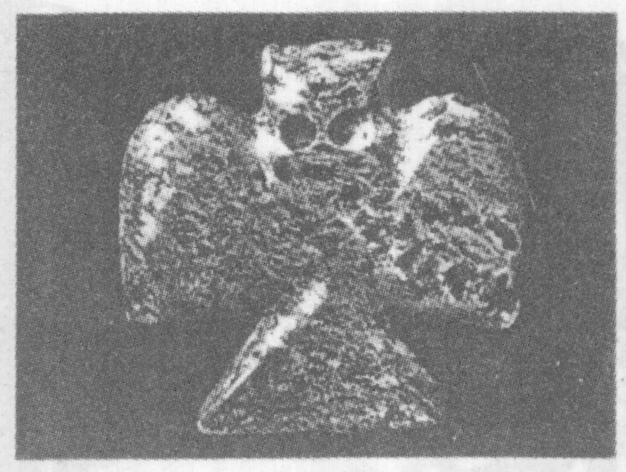


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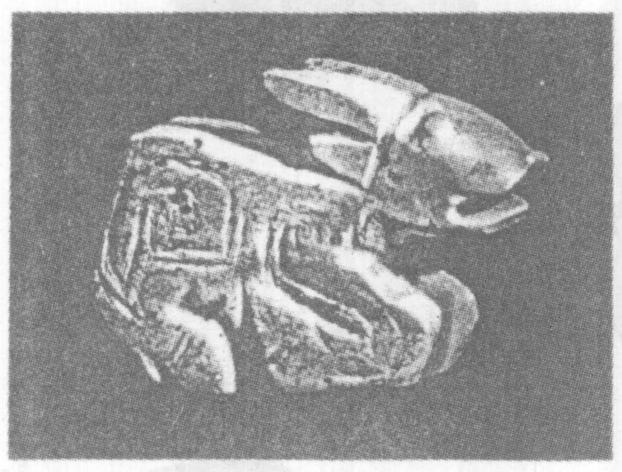
LV



B 10



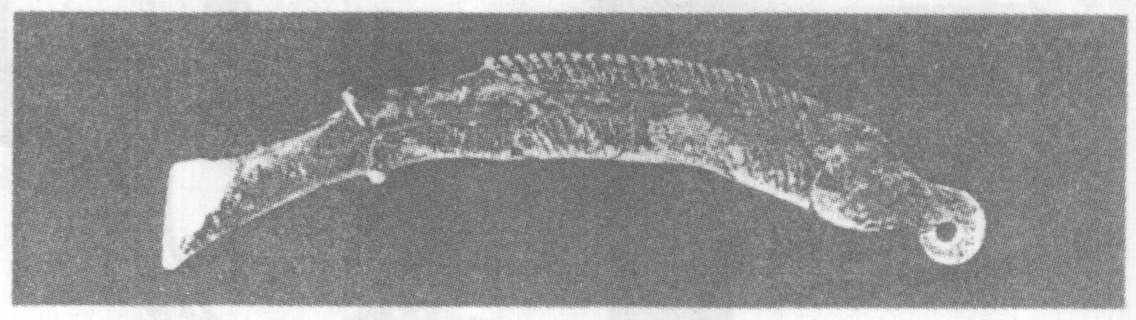
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B 11



B 12

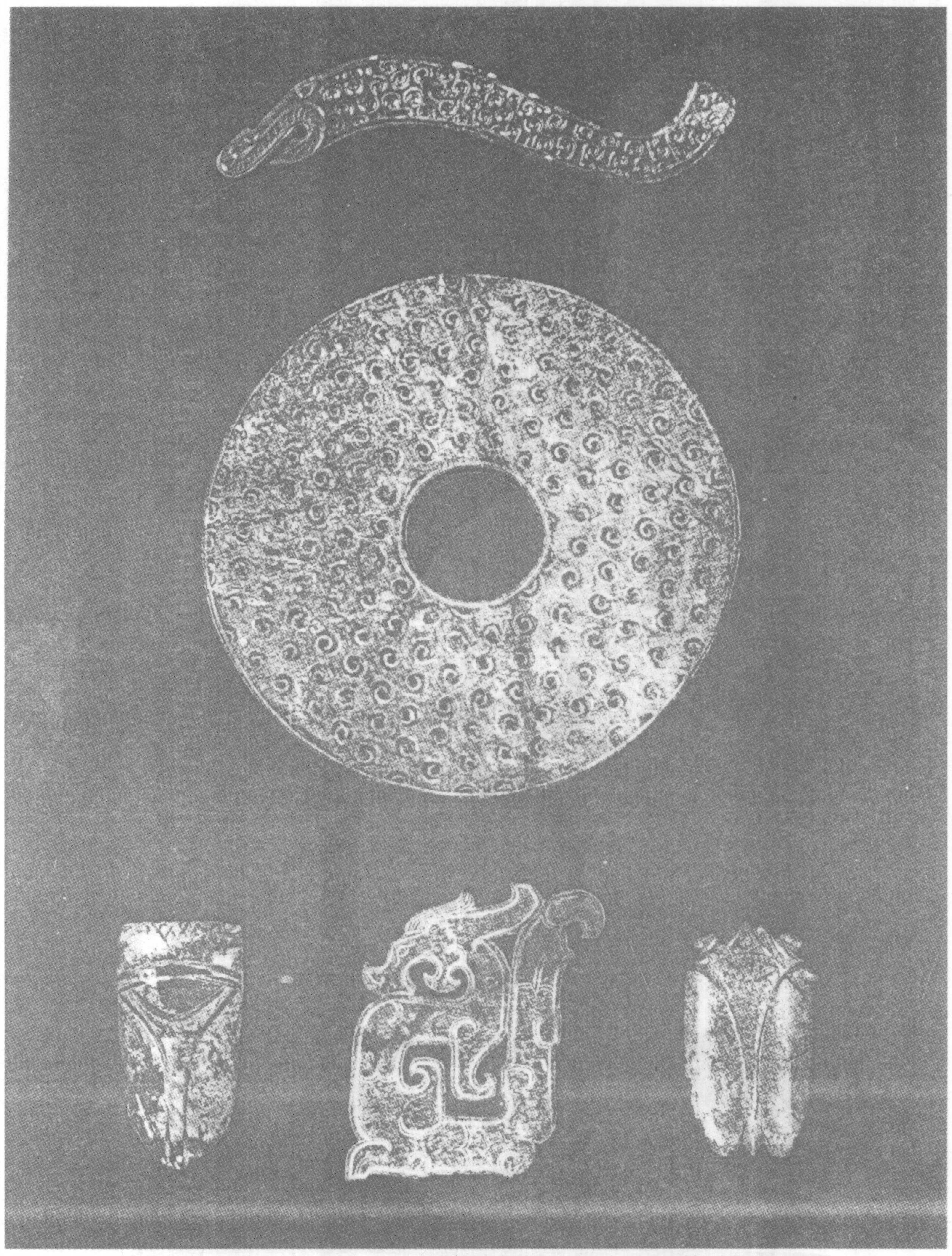


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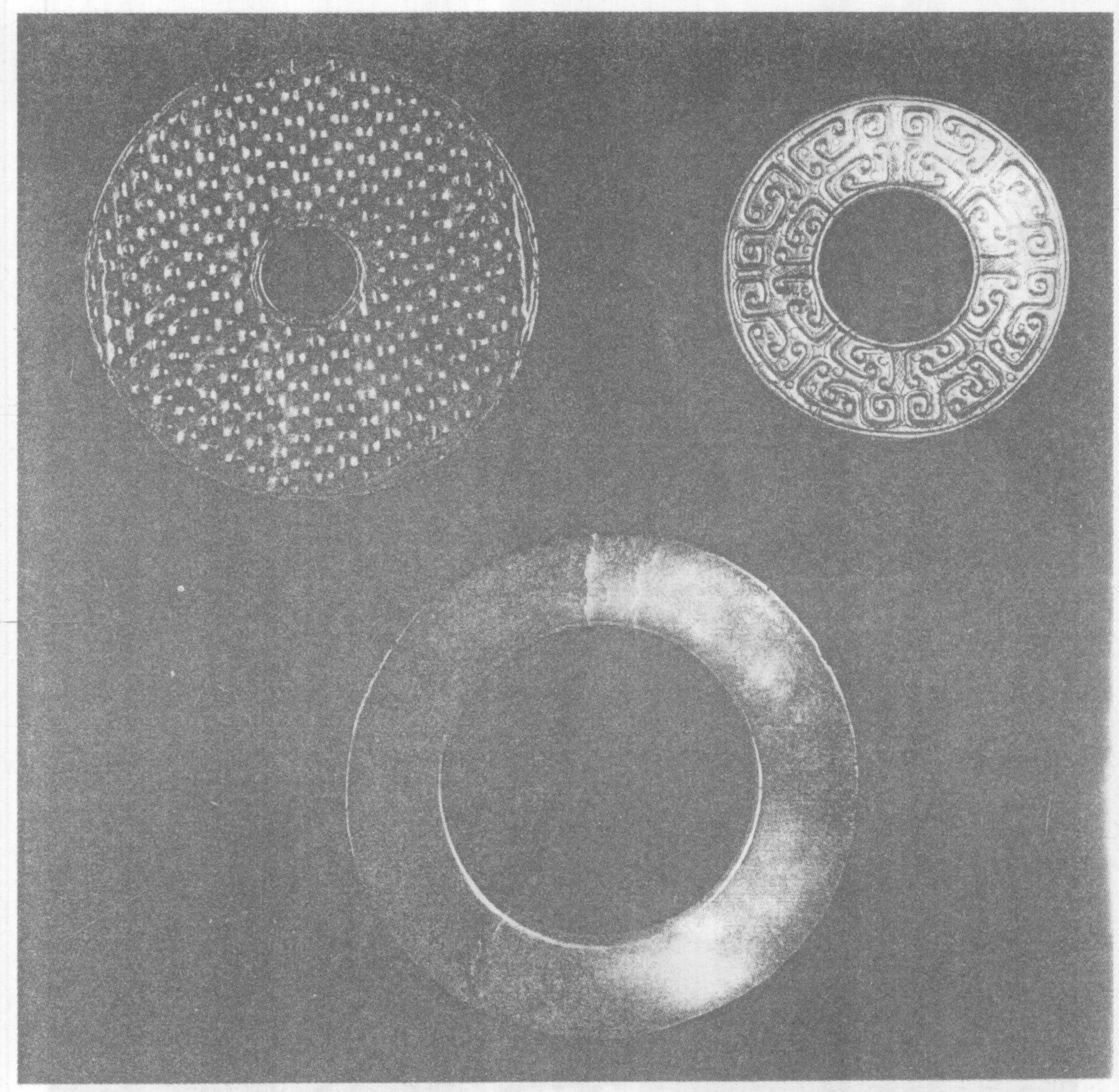
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LVII

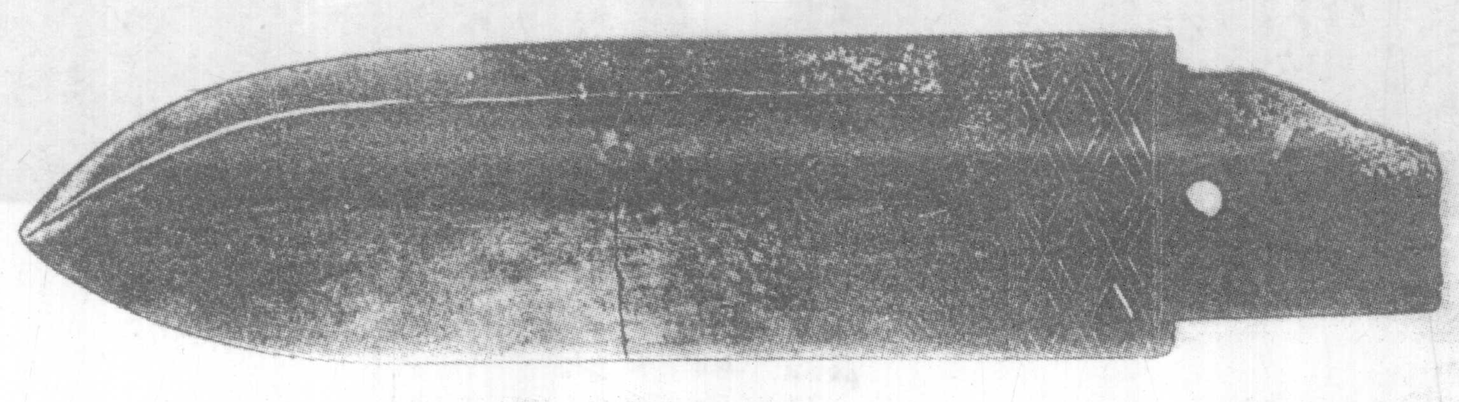


B 16
B 17
B 18 B 19 B 20

LVIII

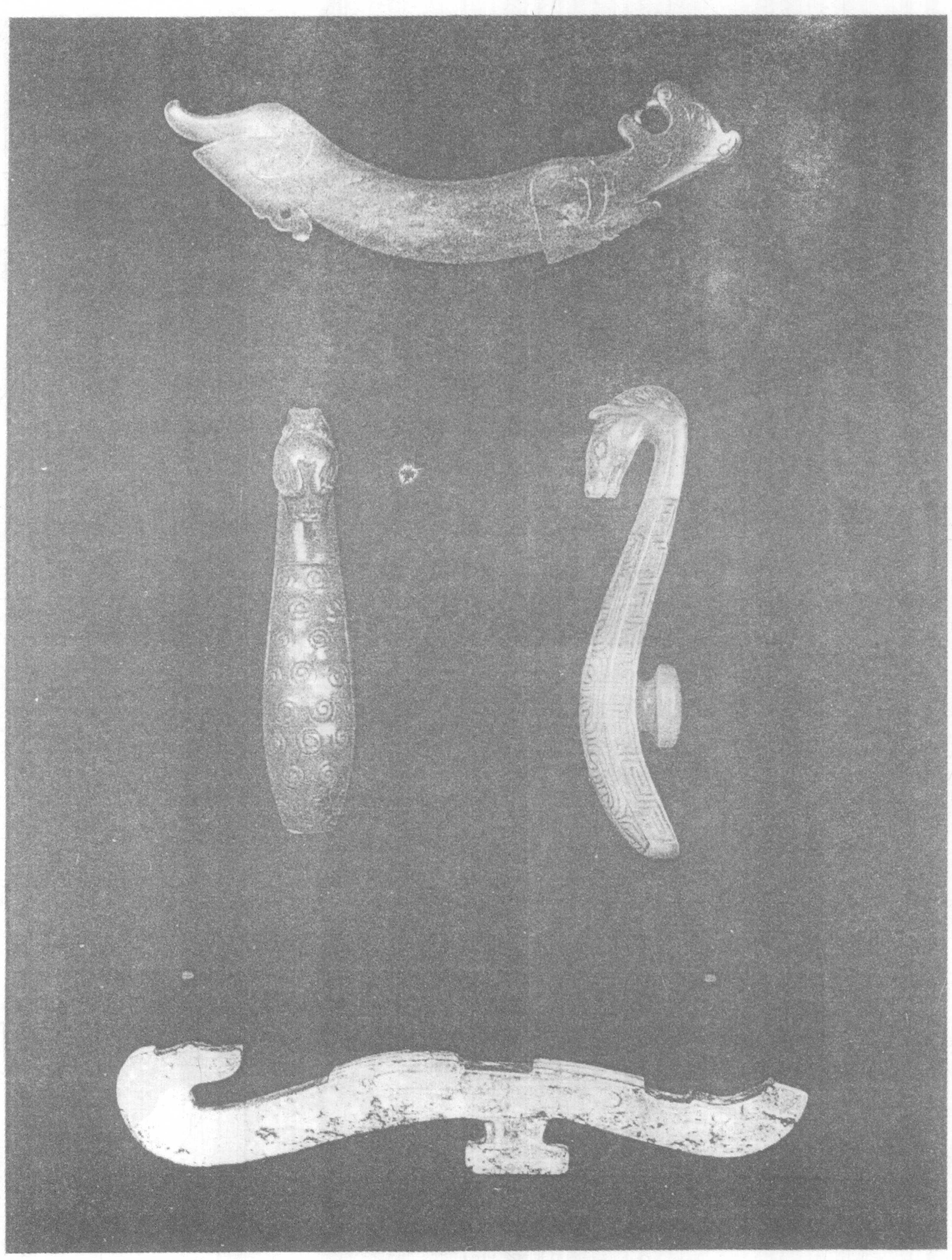


B 22 B 23
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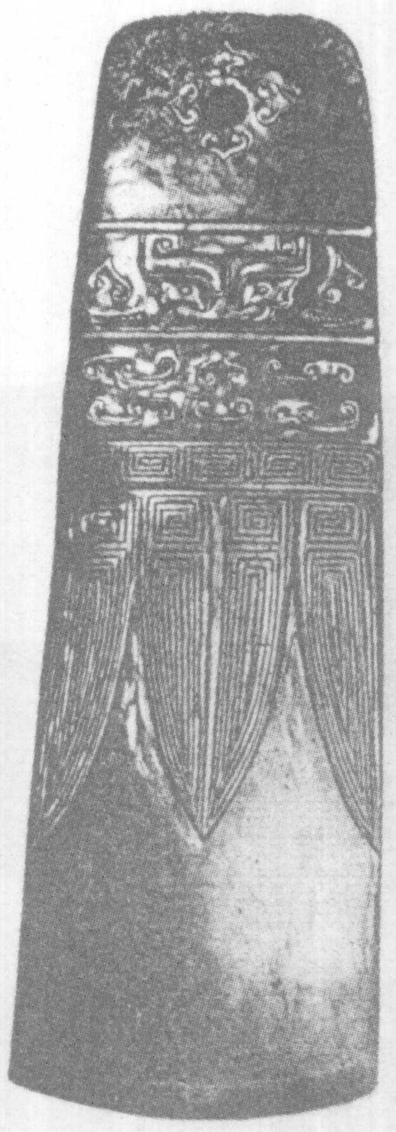
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LIX



B 26
B 27 B 28
B 29

LX



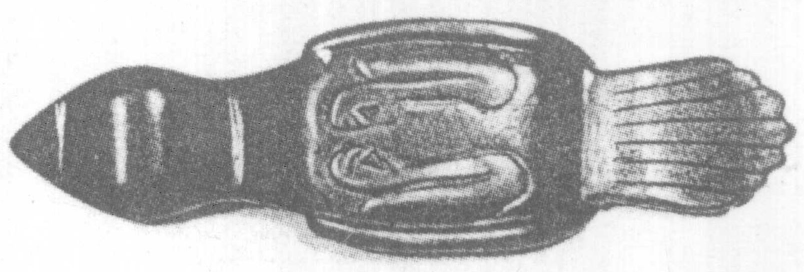
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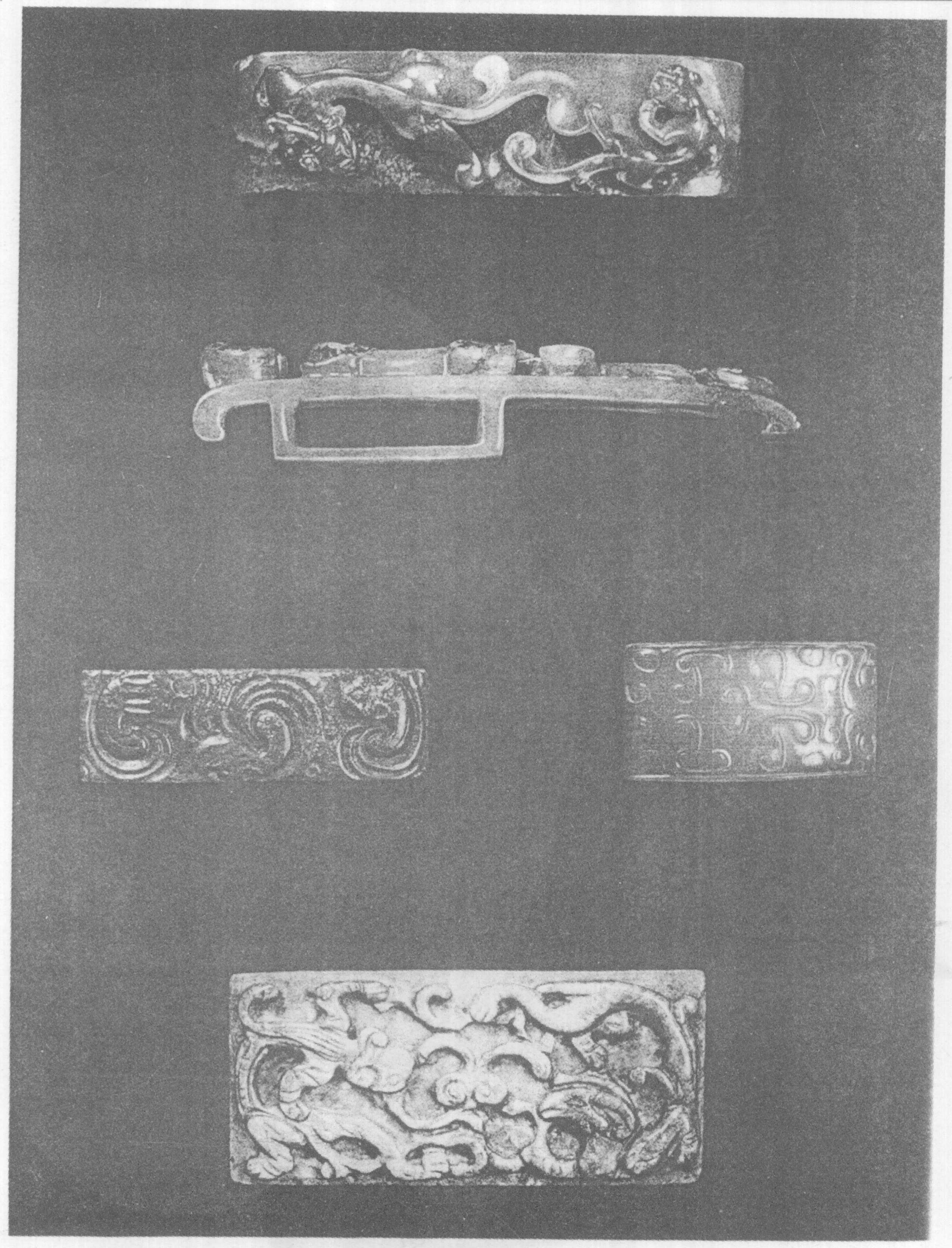


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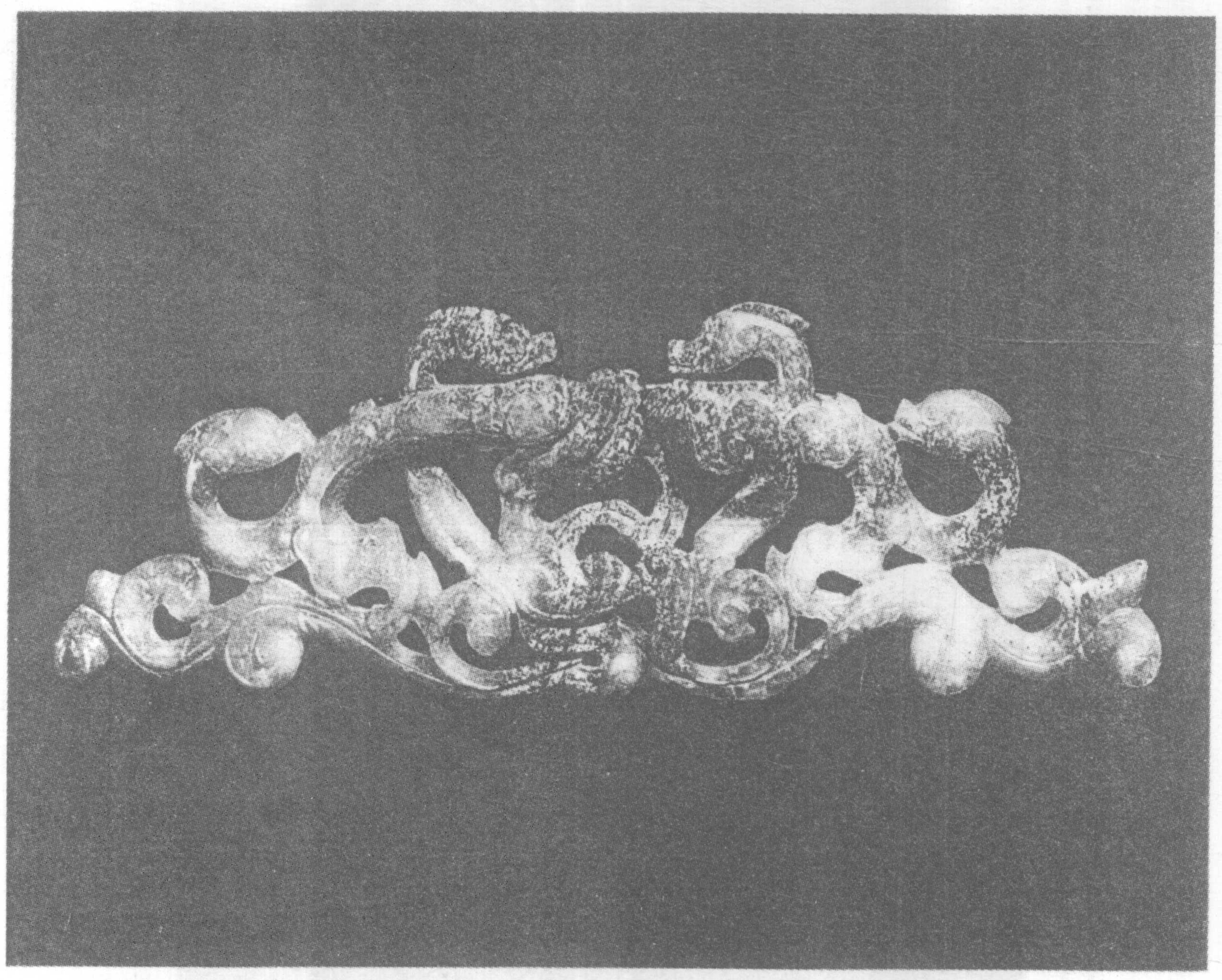
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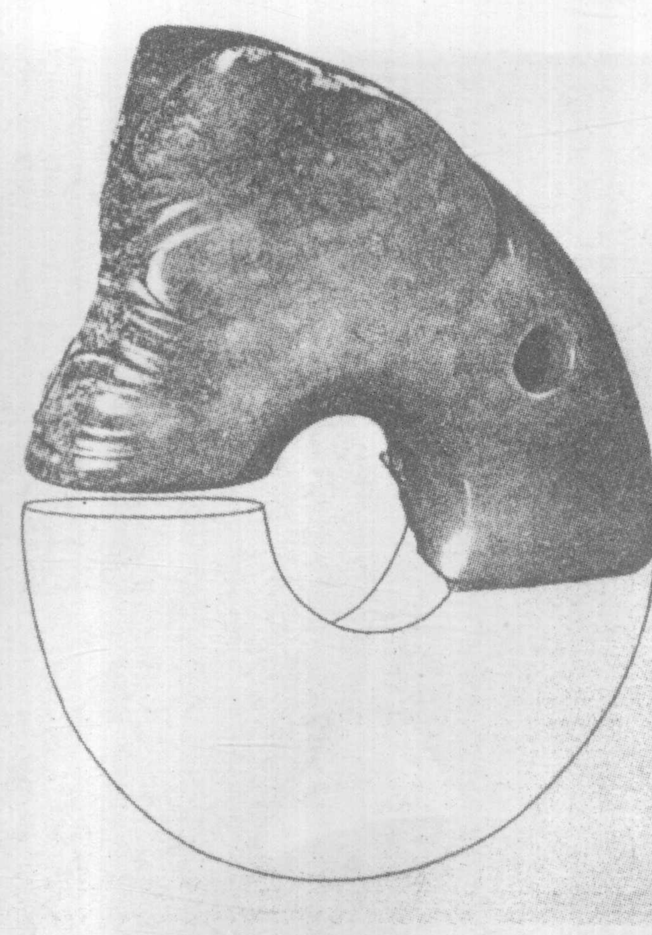
B 31
B 32
B 33 B 34
B 35

LXI



B 42

LXIV

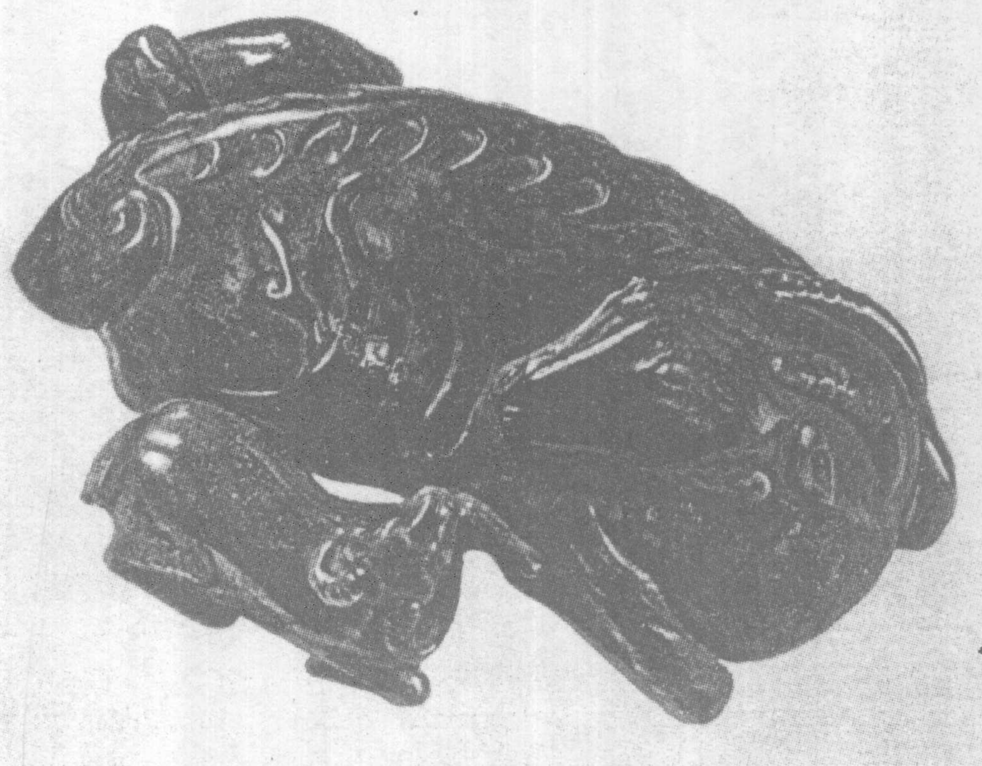


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B 41

LXIII



B 44



B 45

LXVI



B 43

LXV

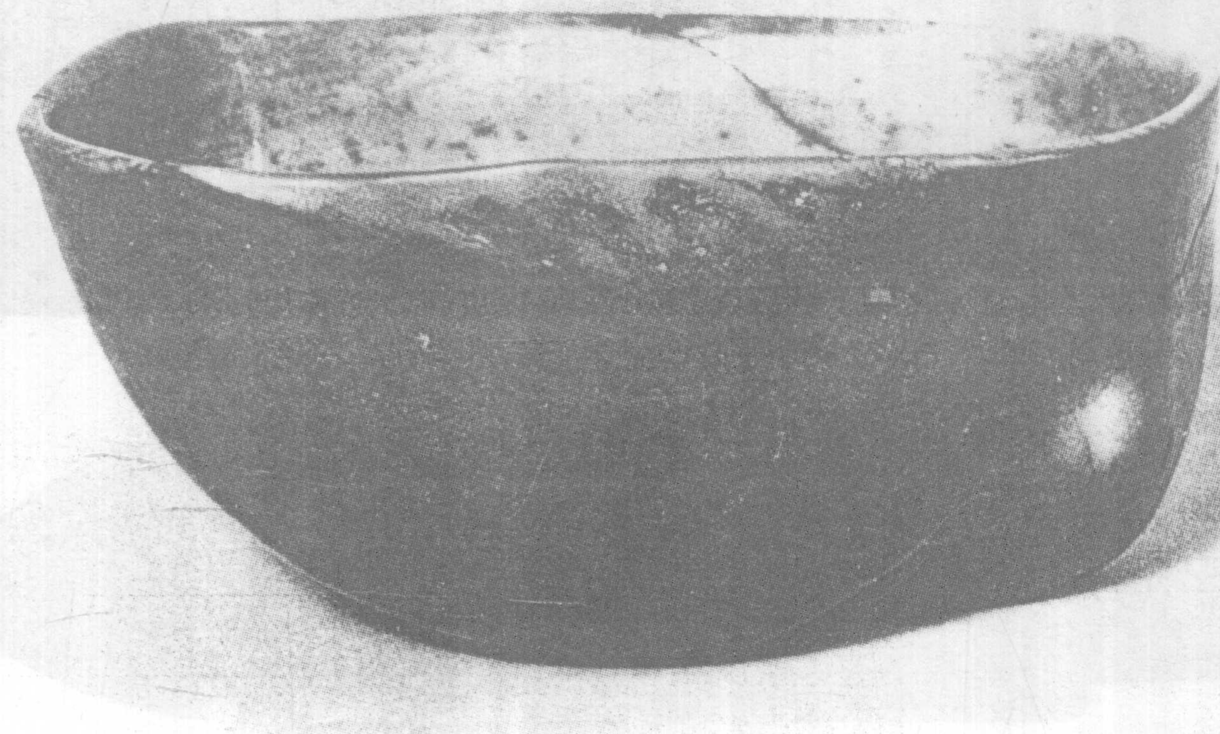


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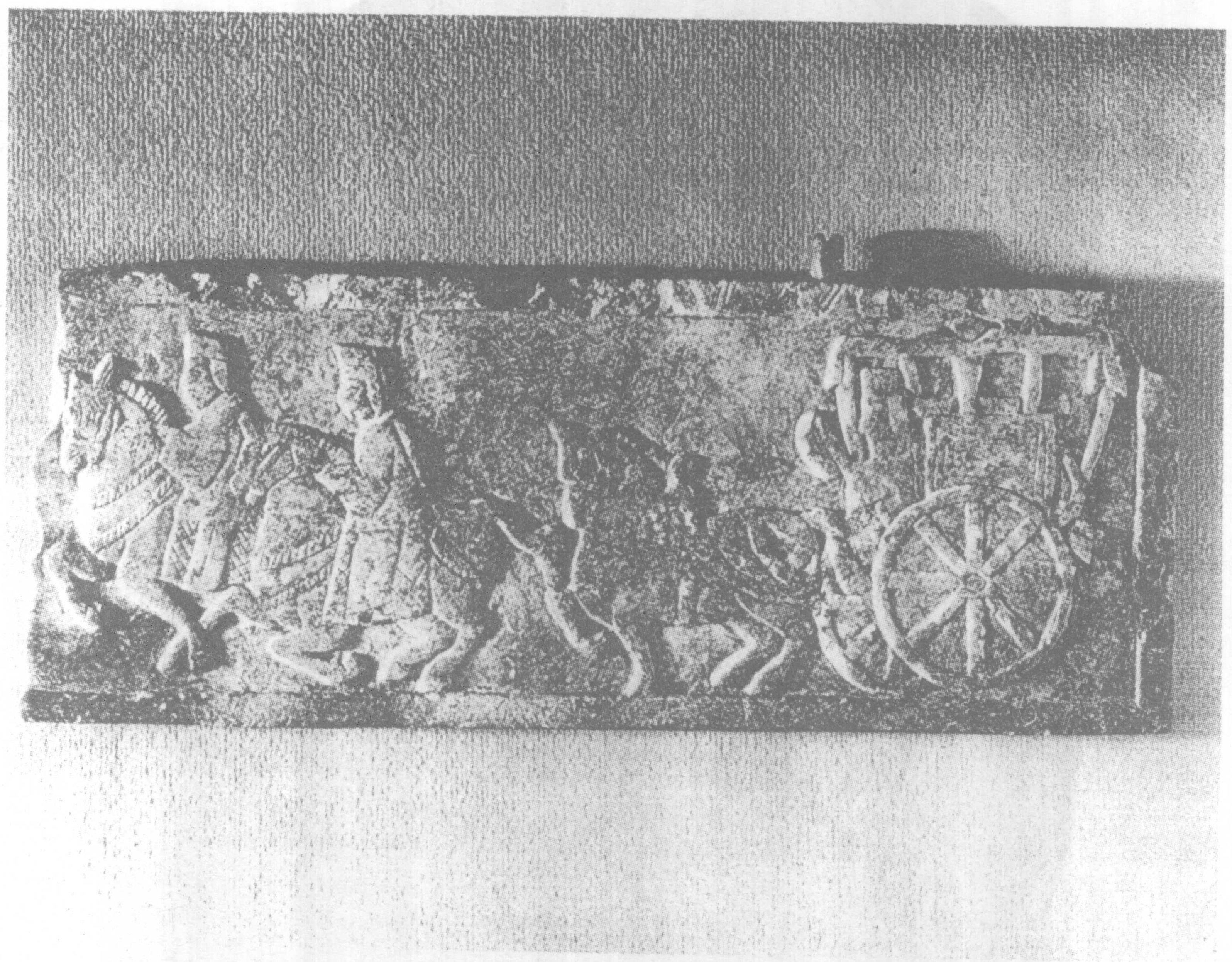


B 46



B 47

LXVII



C 1

LXX

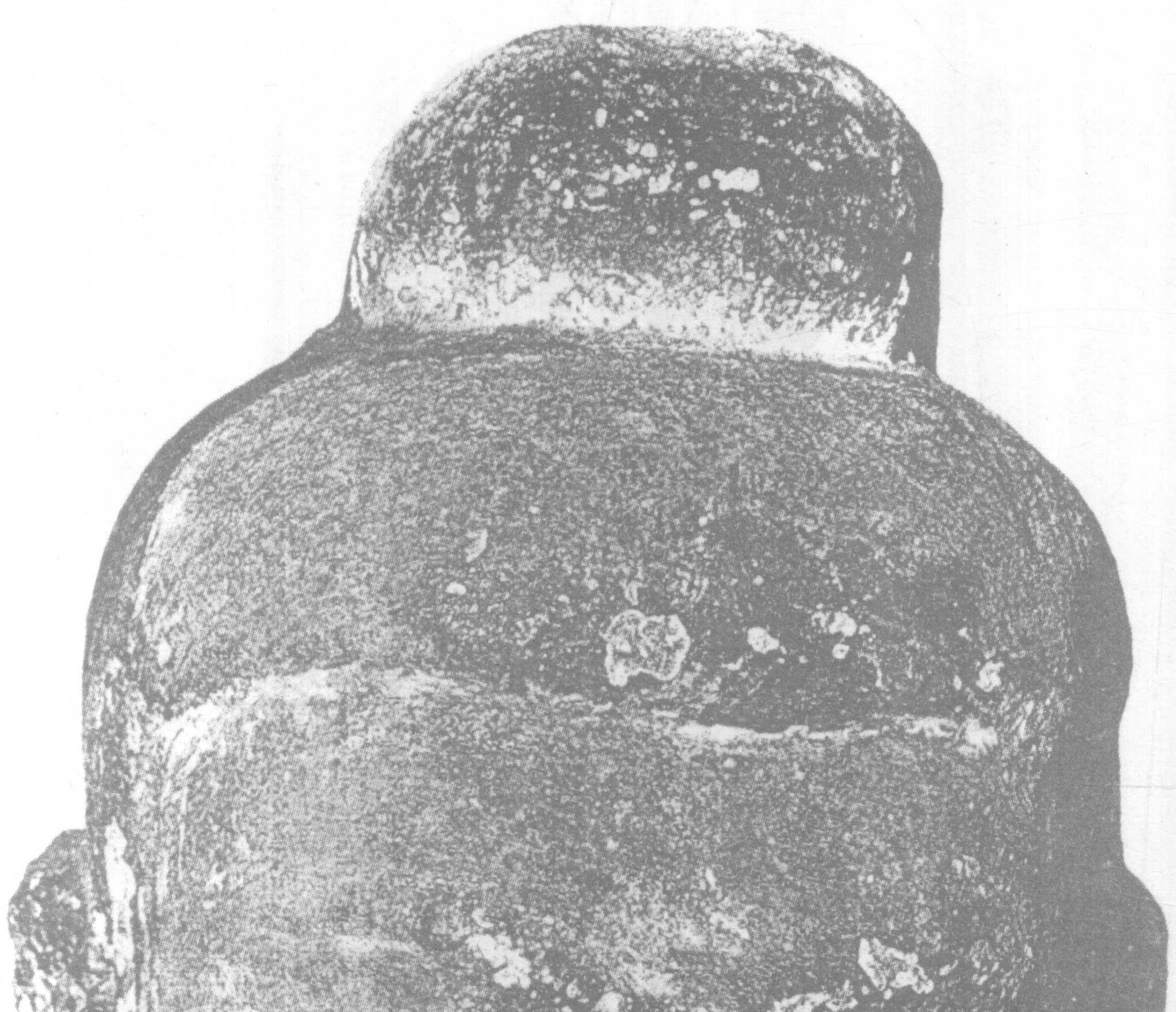


B 49



B 49

LXIX



C 3

LXXII



C 2

LXXI



c 4

LXXIV



c 3

LXXIII



c 6

LXXVI



c 5

LXXV



c 12

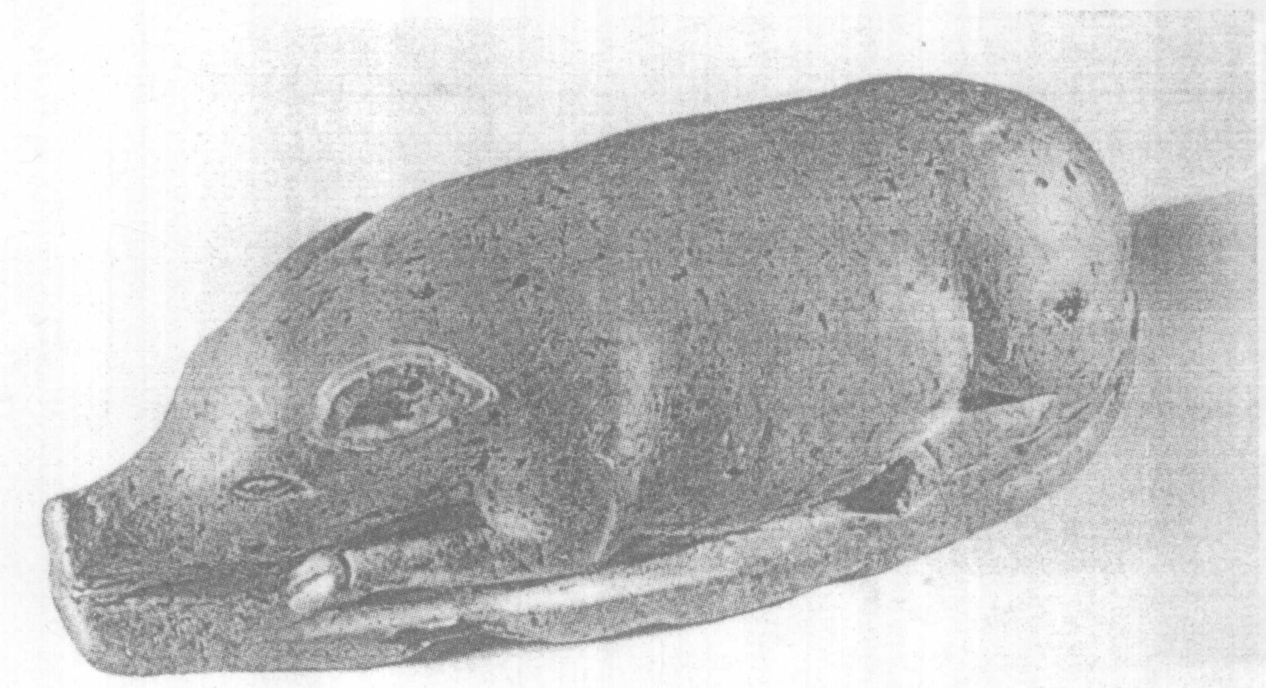
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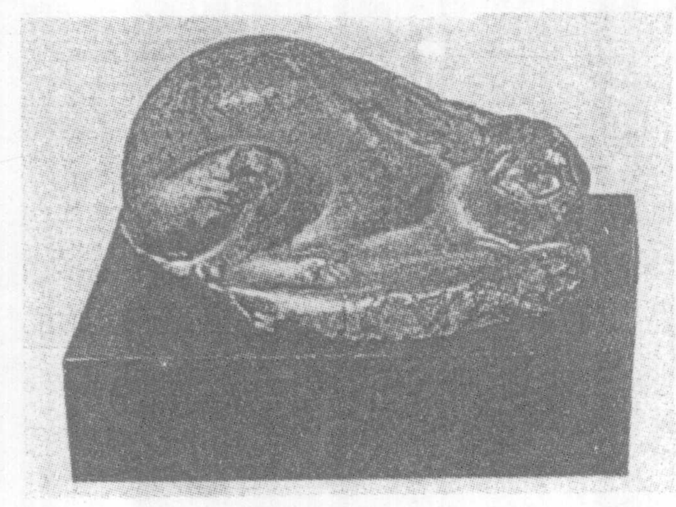
c 7



c 8



c 9



c 10

LXXVII



c 13

LXXX



c 12

LXXIX

後記·劉聰建

任何學術研究工作都是在前人的學術成果基礎上展開的。掌握專業領域的學術動態和吸收前人的研究成果是提高學術水平和進行學術創新的基本條件與方法。

持續出版大型的、高質量的、學術積累性的項目，以多種載體和方式將中國歷史的文明與學術的研究成果向全世界展示，是中國出版人的責任和使命。

四年前，我在完成大型學術文獻性項目《西安碑林全集》（綫裝 8 開 25 函 200 卷 ISBN7-80632-616-2）以後，在中國出版行業領導伍杰先生的關注和支持下，感受於段志洪女士對中國學術領域和出版行業的觀察與分析，了解了中國古文字大系的總體設想和編纂規劃，就《金文文獻集成》的項目定位、體例設計和編輯方案與劉慶柱先生、段志洪女士、馮時先生諸位主編進行了認真仔細的交流、探討與確定。在隨後的編纂、編輯過程中，中國社會科學院考古研究所的諸位學者和項目顧問委員會、學術委員會的專家們給予了極大的支持和關心。在文獻資料的收集與整理過程中，中國社會科學院考古所圖書館、歷史所圖書館、中國國家圖書館、北京大學圖書館等藏書機構給予了大力的幫助，故

宮博物院、香港中文大學、台灣中央研究院、日本東京大學、美國哈佛燕京圖書館等諸多國内外重要的研究機構、國家博物館以不同的形式對本項目的工作給予了關注和支持。

在項目的實施過程中，得到學術界和社會各界各方面的支持。王世民先生在選定目録、編纂方案等方面提供了衆多寶貴的意見；馬承源先生、陳佩芬女士爲項目提供了諸多有價值的建議；以及本書的作者及他們的親屬在知識産權許可方面給予了我們最大的支持；顧問委員會和學術委員會的諸位專家在整個項目的實施中始終給予我們具體的指導和無私的幫助，難以一一贅述，在此一并表示衷心的感謝。參加項目編纂、編輯和印制發行工作的諸位先生，在項目的實施過程中，付出了長期的、不懈的努力以及珍貴的時間。在此特别致謝李定凱、周原孫、吴江江、朱朝旭、劉曉欣、張偉、嚴威峰先生，李昕、劉青、艾涵、汪珊、汪彤女士，没有他們的支持和幫助，項目的順利完成是難以想象的。

深深地感謝曾給予我信任、支持和鼓勵的諸多師長、朋友和機構。在市場難以公平的競争環境中，持續地創新和發展，是對我們核心能力與生存能力的挑戰。

默默整理完四十六册《金文文獻集成》的終稿清樣，回想所走過的一千多個艱苦的日日夜夜，歷史又翻開了新的一頁……

劉聰建

二〇〇五年六月二十一日深夜于北京

《金文文獻集成》著作權公告

根據《世界版權公約》、《中華人民共和國著作權法》及其實施細則，爲尊重《金文文獻集成》各作者的著作權以及相關權益，現將相關法律事項公告如下：

一、中國古文字大系之《金文文獻集成》係學術積累性大型匯編文獻，是對商周金文研究文獻的階段性全景式總結，由劉慶柱、段志洪、馮時主編，中國社會科學院考古研究所編纂。本項目由所邀請的國內外專家學者組成的學術、編輯委員會在國內外已公開發表（北宋至1989年12月底止）的數以萬計的中、外文專著論文中，將金文斷代、考釋、辨僞、曆法、文字學等各方面核心研究文獻二次使用匯編輯成。《金文文獻集成》于2004年由香港明石文化國際出版有限公司和綫裝書局聯合出版發行（2005年6月出齊）。

二、現附上《金文文獻集成》學術、編輯委員會根據編輯體例確認的各作者的論著篇名，敬請登陸www.hkmsc.com,予以核對確認（如有同名异人，同篇异人，同人不同名或筆名的特殊情況，請及時聯繫，以便於統計和付酬），并懇請同意允許使用於《金文文獻集成》（傳真、信函、電子郵件、電話均可)。如作者確認有重要論著在《金文文獻集成》之外篇目，敬請提供複印件，并待編委會確認後在《金文文獻集成》的續編中使用（續編擬收録時間爲1990年1月至2004年12月底)。

三、《金文文獻集成》采用稿酬方式支付許可使用費用。按本項目出版時間上的安排，《金文文獻集成》工作委員會在《金文文獻集成》出版後60天内，按著作權法的相關規定通過中國郵政按已聯繫確認的地址匯出稿酬。凡作者聯繫方式不詳或游學國外或作者已故，其家屬聯繫方式不確定，將由中國版權保護中心或中國社會科學院考古研究所給予確認後由香港明石文化國際出版有限公司支付許可費用，請《金文文獻集成》作者的親友同仁互相轉告，在www.hkmsc.com上核對篇目并及時聯繫我們。

四、特此感謝每位《金文文獻集成》的作者和親屬對金文研究所作出的貢獻以及對我們工作的大力支持！

香港明石文化國際出版有限公司　綫裝書局
《金文文獻集成》編輯委員會
《金文文獻集成》工作委員會
二〇〇五年六月

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